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FILE 'CAPLUS' ENTERED AT 17:27:50 ON 26 JAN 2011
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| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|----------------------|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 51.08 | 253.87 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
|--|------------|---------|
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -6.96 | -6.96 |

=> file reg

| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|----------------------|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 51.08 | 253.87 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
|--|------------|---------|
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -6.96 | -6.96 |

FILE 'REGISTRY' ENTERED AT 17:27:58 ON 26 JAN 2011
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STRUCTURE FILE UPDATES: 25 JAN 2011 HIGHEST RN 1260485-87-7
DICTIONARY FILE UPDATES: 25 JAN 2011 HIGHEST RN 1260485-87-7

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

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REGISTRY includes numerically searchable data for experimental and
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on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> e 268725-21-9/RN

| | | |
|----|-------|----------------|
| E1 | 1 | 268725-19-5/RN |
| E2 | 1 | 268725-20-8/RN |
| E3 | 1 --> | 268725-21-9/RN |

E4 1 268725-22-0/RN
 E5 1 268725-23-1/RN
 E6 1 268725-24-2/RN
 E7 1 268725-25-3/RN
 E8 1 268725-26-4/RN
 E9 1 268725-27-5/RN
 E10 1 268725-28-6/RN
 E11 1 268725-29-7/RN
 E12 1 268725-30-0/RN

=> s e3

L7 1 268725-21-9/RN

=> d

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2011 ACS on STN

RN 268725-21-9 REGISTRY

ED Entered STN: 07 Jun 2000

CN Borate(1-), difluoro[6-[[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
 κN]methyl]-1H-pyrrol-2-yl-
 κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
 (T-4)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Borate(1-), difluoro[6-[[[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
 κN]methyl]-1H-pyrrol-2-yl-
 κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen, (T-4)-
 (9CI)

OTHER NAMES:

CN 3: PN: IT1333820 PAGE: 34 claimed sequence

CN BODIPY 630/650

DR 209340-49-8

MF C29 H27 B F2 N3 O4 S . H

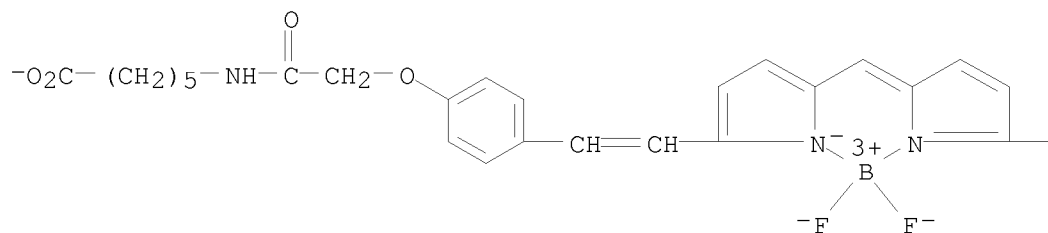
CI CCS

SR CA

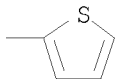
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

CRN (749836-75-7)

PAGE 1-A



● H⁺



47 REFERENCES IN FILE CA (1907 TO DATE)
 14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 48 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.66

256.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-6.96

FILE 'CAPLUS' ENTERED AT 17:28:34 ON 26 JAN 2011

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FILE COVERS 1907 - 26 Jan 2011 VOL 154 ISS 5

FILE LAST UPDATED: 25 Jan 2011 (20110125/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 17:07:03 ON 26 JAN 2011)

FILE 'REGISTRY' ENTERED AT 17:07:21 ON 26 JAN 2011

L1

STRUCTURE UPLOADED

L2 13 S L1 SAM
L3 284 S L1 FULL
L4 254 S L3 AND CAPLUS/LC

FILE 'CAPLUS' ENTERED AT 17:07:56 ON 26 JAN 2011

L5 166 S L4
L6 8 S L5 AND FLUORES?

FILE 'REGISTRY' ENTERED AT 17:27:58 ON 26 JAN 2011
E 268725-21-9/RN

L7 1 S E3

FILE 'CAPLUS' ENTERED AT 17:28:34 ON 26 JAN 2011

=> s 17

L8 48 L7

=> d 18 ibib gi abs hitstr 1-48

L8 ANSWER 1 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:85111 CAPLUS

TITLE: Fluorescent test element designed to detect and/or
determine concentration of endotoxins in liquid
samples

INVENTOR(S): Czyzewski, Jan; Maruszewski, Krzysztof; Gamian,
Andrzej; Rybka, Jacek; Mieszala, Malgorzata; Hreniak,
Agnieszka

PATENT ASSIGNEE(S): ABB SP ZOO, Pol.; Inst Niskich Temperature I Bada;
Inst Immunologii I Terapii DOS

SOURCE: Pol., 8pp.
CODEN: POXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| ----- | --- | ----- | ----- | ----- |
| PL 201709 | B1 | 20090529 | PL 2003-358220 | 20030110 |
| PRIORITY APPLN. INFO.: | | | PL 2003-358220 | 20030110 |

AB The fluorescent test element for the detection and/or determination of
endotoxins

in liquid samples was described. It consists of the substrate layer, porous
matrix from inorg. polymer and covalent compds. connected to the matrix of
biol. active mols. labeled by fluorescent indicator. The polymer matrix
was obtained by the sol-gel method and the active biol. mols. contain
fragments bonding specifically endotoxins.

IT 268725-21-9, BODIPY 630/650

RL: AMX (Analytical matrix); ANST (Analytical study)

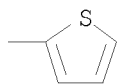
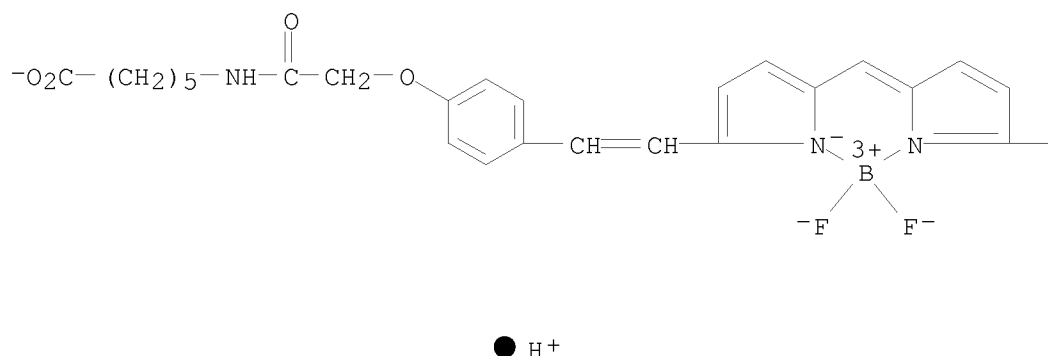
(fluorescent test element designed to detect and/or determine concentration

of

endotoxins in liquid samples)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
κN]methyl]-1H-pyrrol-2-yl-
κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
(T-4)- (CA INDEX NAME)



L8 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1281023 CAPLUS

DOCUMENT NUMBER: 153:475447

TITLE: Fluorescent probe binary system for real-time PCR with diagnostic kit

INVENTOR(S): Oggioni, Marco Rinaldo; Orru, Germano; Pozzi, Gianni

PATENT ASSIGNEE(S): Universita degli Studi di Siena, Italy

SOURCE: Ital., 49pp.
CODEN: ITXXBY

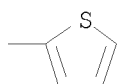
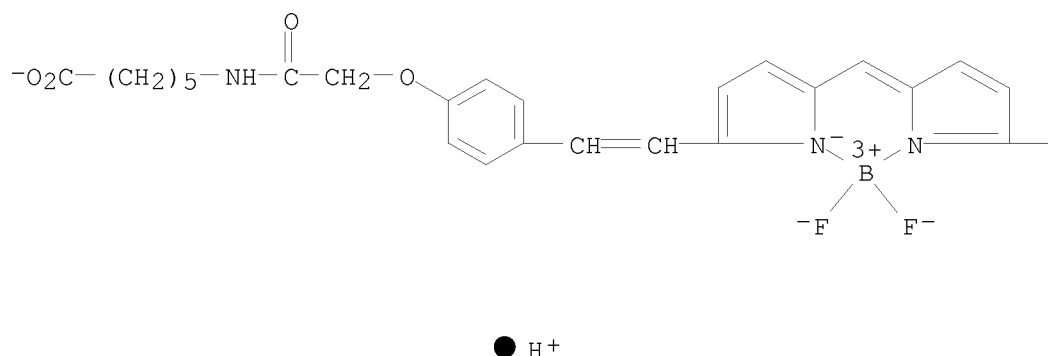
DOCUMENT TYPE: Patent

LANGUAGE: Italian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|------|----------|-----------------|----------|
| | IT 1333820 | B1 | 20060509 | IT 2002-RM655 | 20021230 |
| PRIORITY APPLN. INFO.: | | | | IT 2002-RM655 | 20021230 |
| AB | Oligonucleotide probe binary system is disclosed for real-time PCR detection of Mycobacterium tuberculosis DNA sequence IS 6110. The method may be adapted to other microbial species. | | | | |
| IT | 268725-21-9, Bodipy 630/650 RL: DGN (Diagnostic use); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (fluorescent probe binary system for real-time PCR with diagnostic kit) | | | | |
| RN | 268725-21-9 CAPLUS | | | | |
| CN | Borate(1-), difluoro[6-[[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME) | | | | |



L8 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:238385 CAPLUS

DOCUMENT NUMBER: 152:306017

TITLE: FRET-based assay for determining human neutrophil elastase activity in the wound site, and use for diagnosis of active wound infection

INVENTOR(S): Wardell, Mark R.

PATENT ASSIGNEE(S): Greystone Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 28pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2010022281 | A1 | 20100225 | WO 2009-US54532 | 20090820 |
| W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

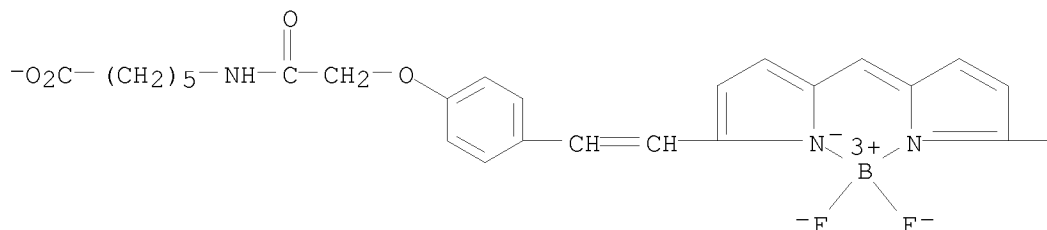
PRIORITY APPLN. INFO.: US 2008-90495P P 20080820
US 2008-90683P P 20080821

AB Measuring the level of human neutrophil elastase (HNE) activity in the

wound site enables diagnosing whether a chronic wound has active infection. A FRET peptide substrate containing an HNE-specific amino acid sequence is incubated with wound fluid and measured for fluorescent radiation to determine the level of HNE activity. The HNE diagnostic test is a rapid, point-of-care indicator of the level of HNE activity in wound fluid as an indicator of "active" infection.

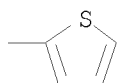
IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (fluorophore; FRET-based assay for determining human neutrophil elastase activity in wound site, and use for diagnosis of active wound infection)
 RN 268725-21-9 CAPLUS
 CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

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● H⁺

PAGE 1-B



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2009:1508342 CAPLUS
 DOCUMENT NUMBER: 152:85757
 TITLE: Fluorescence Enhancement by Surface Plasmon Polaritons on Metallic Nanohole Arrays
 AUTHOR(S): Guo, Peng-Feng; Wu, Shan; Ren, Qin-Jun; Lu, Jian; Chen, Zhanghai; Xiao, Shou-Jun; Zhu, Yong-Yuan
 CORPORATE SOURCE: Peop. Rep. China
 SOURCE: Journal of Physical Chemistry Letters (2010), 1(1), 315-318
 CODEN: JPCLCD; ISSN: 1948-7185
 URL: <http://pubs.acs.org/doi/pdf/10.1021/jz900119p>
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB A maximum fluorescence enhancement of 11 times was achieved by surface plasmon polaritons (SPPs) on a Ag nanohole array region in reflection mode, compared to that on the nonarray area. A 30 nm dielec. SiO₂ film was sputtered on the Ag film as a spacer to sep. the fluorophore from Ag for attenuation of the fluorescence quenching. An array period of 550 nm and a nanohole radius of 100 nm were optimized to match the most efficient fluorescence excitation and emission of a B-dipyrromethene fluorophore (BODIPY 630/650) on the array region.

IT 268725-21-9

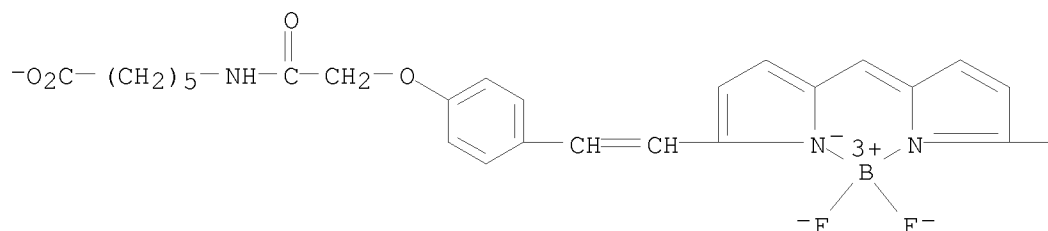
RL: PRP (Properties)

(fluorescence enhancement by surface plasmon polaritons on metallic nanohole arrays)

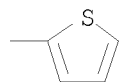
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1416415 CAPLUS

DOCUMENT NUMBER: 152:28320

TITLE: DNA sequencing method with double verification of base information using fluorescence primer

INVENTOR(S): Lu, Zuhong; Luo, Junfeng; Bai, Yunfei; Xiao, Pengfeng; Lu, Hua

PATENT ASSIGNEE(S): Wuxi Agenebio Bioinformatics Co., Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 16pp.

DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|----------|
| CN 101575639 | A | 20091111 | CN 2009-10033400 | 20090619 |
| PRIORITY APPLN. INFO.: | | | CN 2009-10033400 | 20090619 |

OTHER SOURCE(S): MARPAT 152:28320

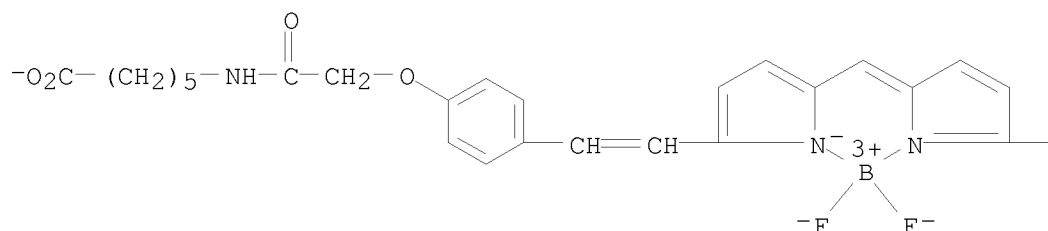
AB Disclosed is a DNA sequencing method with double verification of base information. The method comprises: (1) hybridizing a sequencing primer containing a 3'-terminal thio-modified base with the immobilized DNA sequence to be sequenced. The method comprises: (2) adding the solution for the first extension reaction, wherein the solution contains DNA polymerase, fluorescence-labeled dNTPs, and normal dNTPs, performing strand extension reaction, and judging base information through fluorescence detection. The method comprises: (3) removing the fluorescence-labeled dNTPs participating in the first extension reaction by enzymic digestion. The method comprises: (4) adding the solution for the second extension reaction, wherein the solution contains DNA polymerase, fluorescence-labeled thio-modified dNTPs with deprotectable groups, and thio-modified dNTPs with deprotectable groups and without fluorescence labeling, performing extension reaction, and judging base information at the same base positions as those in the base information obtained in the first extension reaction. The method comprises: (5) removing the deprotectable groups of the fluorescence-labeled dNTPs participating in the second extension reaction with a chemical reagent, removing the fluorescence groups of the dNTPs simultaneously, and repeating steps 2-5 until entire base information of the DNA sequence is confirmed. The method was applied to perform the sequence anal. of the exon 1 of human gene p16.

IT 268725-21-9D, Bodipy 630/650, dNTP labeled with
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (DNA sequencing method with double verification of base information using fluorescence primer)

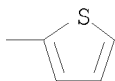
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺



L8 ANSWER 6 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2009:950944 CAPLUS
 DOCUMENT NUMBER: 151:237615
 TITLE: Methods for detection and amplification of nucleic acids using variant scorpion primers and diagnostic applications
 INVENTOR(S): Lee, Ming-Chou
 PATENT ASSIGNEE(S): Quest Diagnostics Investments Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 16 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| US 20090197254 | A1 | 20090806 | US 2007-957334 | 20071214 |
| WO 2009079215 | A1 | 20090625 | WO 2008-US85438 | 20081203 |

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2007-957334 A 20071214

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Disclosed herein are methods of detecting target nucleic acids. In particular, methods for avoiding loss of the fluorescent label from an amplicon that is generated using a Scorpion primer and a polymerase with 5' exonuclease activity. The methods use a Scorpion primer which comprises a fluorophore, a quencher, and in 5' to 3' order, a probe region, a linker region and a primer region, wherein the quencher is located at or near the 5' end, and, wherein the primer is complementary to the target nucleic acid and the probe region hybridizes to a complementary sequence in an extension product of the primer. The methods provide for detection of target nucleic acids in simplex or multiplex formats. Disclosed herein are methods of detecting target nucleic acids. In particular, methods for avoiding loss of the fluorescent label from an amplicon that is generated using a Scorpion primer and a polymerase with 5' exonuclease activity are provided. The methods use a Scorpion primer which comprises a fluorophore, a quencher, and in 5' to 3' order, a probe region, a linker region and a primer region, wherein the quencher is located at or near the 5' end, and, wherein the primer is complementary to

the target nucleic acid and the probe region hybridizes to a complementary sequence in an extension product of the primer. The methods provide for detection of target nucleic acids in simplex or multiplex formats.

IT 268725-21-9

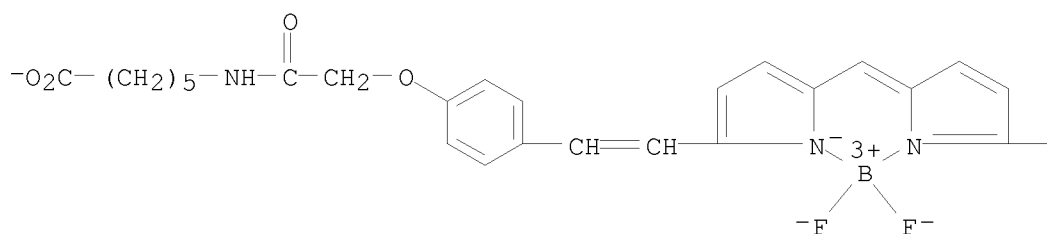
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(BODIPY 630/650, fluorophore; methods for detection and amplification of nucleic acids using variant scorpion primers and diagnostic applications)

RN 268725-21-9 CAPLUS

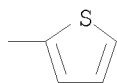
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

PAGE 1-B



L8 ANSWER 7 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:766317 CAPLUS

DOCUMENT NUMBER: 151:71015

TITLE: Methods for detection and amplification of nucleic acids using variant scorpion primers and diagnostic applications

INVENTOR(S): Lee, Ming-Chou

PATENT ASSIGNEE(S): Quest Diagnostics Investments Inc., USA

SOURCE: PCT Int. Appl., 32pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2009079215 | A1 | 20090625 | WO 2008-US85438 | 20081203 |

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 20090197254 A1 20090806 US 2007-957334 20071214

PRIORITY APPLN. INFO.: US 2007-957334 A 20071214

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Disclosed herein are methods of detecting target nucleic acids. In particular, methods for avoiding loss of the fluorescent label from an amplicon that is generated using a Scorpion primer and a polymerase with 5' exonuclease activity are provided. The methods use a Scorpion primer which comprises a fluorophore, a quencher, and in 5' to 3' order, a probe region, a linker region and a primer region, wherein the quencher is located at or near the 5' end, and, wherein the primer is complementary to the target nucleic acid and the probe region hybridizes to a complementary sequence in an extension product of the primer. The methods provide for detection of target nucleic acids in simplex or multiplex formats.

IT 268725-21-9

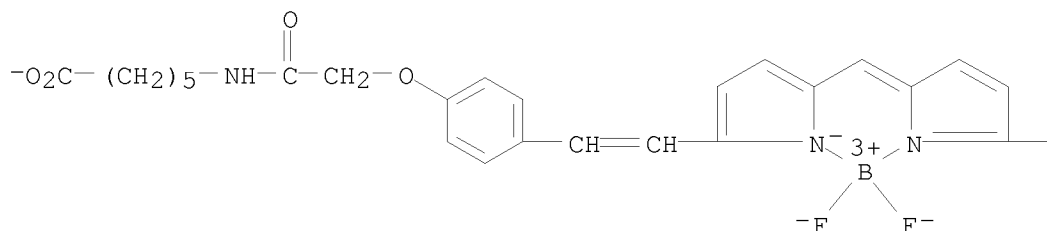
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(BODIPY 630/650, fluorophore; methods for detection and amplification of nucleic acids using variant scorpion primers and diagnostic applications)

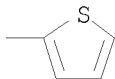
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2009:336545 CAPLUS
 DOCUMENT NUMBER: 150:324649
 TITLE: Generic protein kinase/protein phosphatase assay with single fluorescence readout
 INVENTOR(S): Enderle, Thilo; Roth, Doris
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
 SOURCE: PCT Int. Appl., 20pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2009033580 | A1 | 20090319 | WO 2008-EP7122 | 20080901 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM CA 2698926 A1 20090319 CA 2008-2698926 20080901 EP 2201129 A1 20100630 EP 2008-801776 20080901 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS JP 2010538606 T 20101216 JP 2010-523310 20080901 IN 2010MN00408 A 20100730 IN 2010-MN408 20100303 US 20100203554 A1 20100812 US 2010-677127 20100309 CN 101802214 A 20100811 CN 2008-80106373 20100310 PRIORITY APPLN. INFO.: EP 2007-115987 A 20070910 WO 2008-EP7122 W 20080901 | | | | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to a generic method for detecting a kinase or phosphatase activity. The method comprises the steps of incubating a kinase or phosphatase activity sample with a kinase or phosphatase substrate mol. comprising either a fluorophore having a detectable readout or mol. with an aromatic group which serves as a quencher of the fluorophore. The mixture is incubated with a detection entity comprising either a fluorophore or a mol. with an aromatic group and a binding partner, wherein

the substrate mol. and the detection entity are capable of binding to the binding partner and the binding of the substrate mol. and the detection entity to the binding partner lead to an altered readout of the fluorophore. The readout of the fluorophore in the mixture is then measured, wherein an altered readout of the fluorophore compared to a blank is indicative for the presence of a kinase or phosphatase activity in the sample. Thus, InCl3 or IMAP beads may be used as a binding partner, phosphorylated and unphosphorylated peptides of the sequence Cys-Gly-Tyr labeled with MR121 and Atto 700 at the Cys residue as the fluorophore, and the peptide Trp-Gly-phosphoTyr as the detection entity. The quenching of the fluorescence intensity of MR121 or Atto 700 by tryptophan being either static quenching by formation of a non-fluorescent ground state complex or collisional quenching is a short range interaction that assures that it occurs only if the fluorophore entity and the tryptophan entity are bound to the binding partner. The robust and sensitive fluorescence readout and the simple and easy to use protocol makes the assay also amenable for high d. microtiter plates or for processing and readout in a microfluidics system.

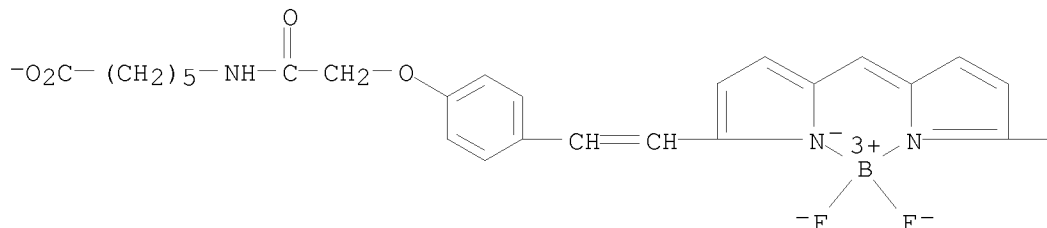
IT 268725-21-9, Bodipy 630/650

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(generic protein kinase/protein phosphatase assay with single fluorescence readout)

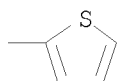
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:1507088 CAPLUS
DOCUMENT NUMBER: 150:48004

TITLE: Methods and compounds for regulating apoptosis, and assay for compound identification
 INVENTOR(S): Reed, John C.; Yip, Kenneth; Sergienko, Eduard; Su, Ying
 PATENT ASSIGNEE(S): The Burnham Institute for Medical Research, USA
 SOURCE: PCT Int. Appl., 159 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2008154207 | A1 | 20081218 | WO 2008-US65567 | 20080602 |
| WO 2008154207 | A9 | 20100422 | | |
| W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| US 20090118135 | A1 | 20090507 | US 2008-131427 | 20080602 |
| PRIORITY APPLN. INFO.: | | | US 2007-942924P | P 20070608 |
| | | | US 2008-38031P | P 20080319 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 150:48004

AB An assay for determining compds. that inhibit activity of a Bcl-2 protein, or affect conversion of Bcl-2 from an antiapoptotic to a proapoptotic form are described. In addition, compds. that modulate the function of anti-apoptotic proteins such as Bcl-2 and related Bcl-2 family members are identified.

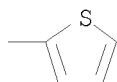
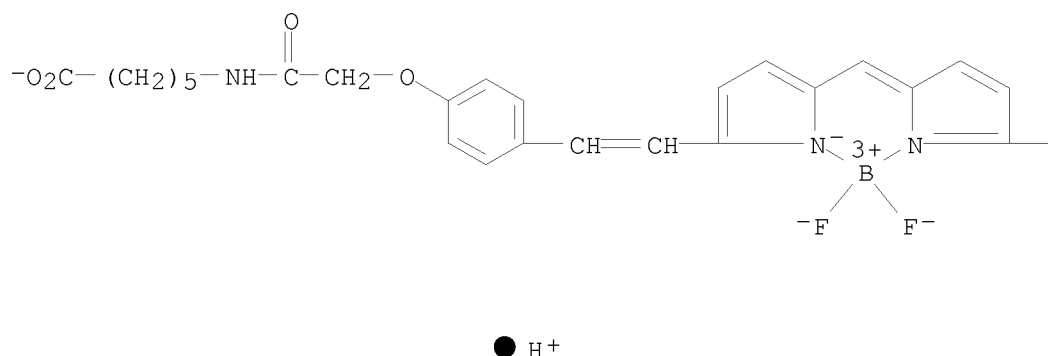
IT 268725-21-9

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(BODIPY 630/650; methods and compds. for regulating apoptosis, and assay for compound identification)

RN 268725-21-9 CAPLUS

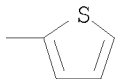
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:1247262 CAPLUS
DOCUMENT NUMBER: 149:464114
TITLE: Conjugates of human papillomavirus strain-specific
probes with beads, multiplex viral detection, and
diagnosis of viral infection
INVENTOR(S): Park, Daniel J.; Khan, Zaheer; Poetter, Karl F.
PATENT ASSIGNEE(S): Genera Biosystem Pty Ltd., Australia
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2008124091 | A2 | 20081016 | WO 2008-US4441 | 20080404 |
| WO 2008124091 | A3 | 20090115 | | |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, | | | | |



L8 ANSWER 11 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:727113 CAPLUS

DOCUMENT NUMBER: 150:1049

TITLE: Development of a duplex quantitative polymerase chain reaction assay for detection of bovine herpesvirus 1 and bovine viral diarrhea virus in bovine follicular fluid

AUTHOR(S): Marley, Mylissa S. D.; Givens, M. Daniel; Galik, Patricia K.; Riddell, Kay P.; Stringfellow, David A.

CORPORATE SOURCE: Department of Pathobiology, College of Veterinary Medicine, Auburn University, Auburn, AL, 36849, USA

SOURCE: Theriogenology (2008), 70(2), 153-160

CODEN: THGNBO; ISSN: 0093-691X

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The objective of this study was to develop a duplex quant. polymerase chain reaction (qPCR) assay for simultaneous detection of bovine herpesvirus 1 (BoHV-1) and bovine viral diarrhea virus (BVDV) type I and type II. Follicular fluid was collected from a BoHV-1 acutely infected heifer, a BVDV I persistently infected heifer, and from 10 ovaries recovered from an abattoir. Both the BoHV-1 and BVDV contaminated follicular fluid were diluted 1:5 to 1:107 using the pooled, abattoir-origin follicular fluid. Each dilution sample was analyzed using the duplex qPCR, virus isolation, reverse transcription-nested PCR (RT-nPCR), and BoHV-1 qPCR. The duplex qPCR was able to simultaneously detect BoHV-1 and BVDV I in the fluid diluted to 1:100 and 1:1000, resp. These results corresponded with the reverse transcription-nested PCR and BoHV-1 qPCR. Therefore, the duplex qPCR might be used for quality assurance testing to identify these two viruses in cells, fluids and tissues collected from donor animals and used in reproductive technologies.

IT 268725-21-9D, Bodipy 630/650, 5'-probe conjugation

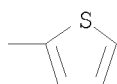
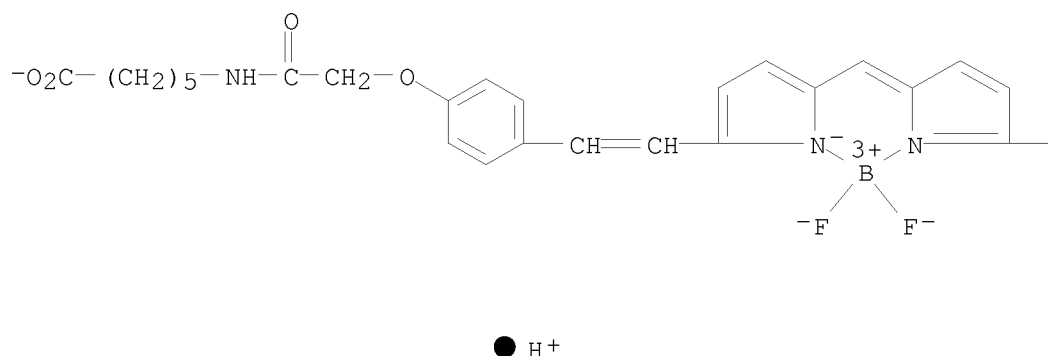
RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties);

ANST (Analytical study); BIOL (Biological study); USES (Uses)

(development of a duplex quant. polymerase chain reaction assay for detection of bovine herpesvirus 1 and bovine viral diarrhea virus in bovine follicular fluid)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:1308609 CAPLUS

DOCUMENT NUMBER: 147:534630

TITLE: Methods and compositions for treatment of human immunodeficiency virus infection with conjugated antibodies or antibody fragments

INVENTOR(S): Goldenberg, David M.; Chang, Chien Hsing; Rossi, Edmund A.; McBride, William J.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 42

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 20070264265 | A1 | 20071115 | US 2007-745692 | 20070508 |
| CA 2651285 | A1 | 20071122 | CA 2007-2651285 | 20070508 |
| WO 2007134037 | A3 | 20081127 | WO 2007-US68449 | 20070508 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AP, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, EA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, EP, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, | | | | |

MC, NL, PL, PT, RO, SE, SI, SK, TR, OA, BF, BJ, CF, CG, CI, CM,
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EP 2016173 A2 20090121 EP 2007-761994 20070508
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AL, BA, HR, MK, RS
CN 101506358 A 20090812 CN 2007-80026776 20070508
JP 2009538284 T 20091105 JP 2009-511157 20070508
US 20090202487 A1 20090813 US 2009-418877 20090406
PRIORITY APPLN. INFO.:

US 2006-800342P P 20060515
US 2005-668603P P 20050406
US 2005-728292P P 20051019
US 2005-751196P P 20051216
US 2006-782332P P 20060314
US 2006-389358 A2 20060324
US 2006-391584 A3 20060328
US 2006-478021 A2 20060629
US 2006-864530P P 20061106
US 2006-633729 A3 20061205
US 2007-745692 A2 20070508
WO 2007-US68449 W 20070508
US 2007-925408 A2 20071026
US 2008-43932P P 20080410
US 2008-104916P P 20081013
US 2008-119542P P 20081203
US 2009-396605 A2 20090303
US 2009-396965 A2 20090303

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention concerns methods and compns. for treatment of HIV
infection in a subject. The compns. may comprise a targeting mol. against
an HIV antigen, such as an anti-HIV antibody or antibody fragment. The
anti-HIV antibody or fragment may be conjugated to a variety of cytotoxic
agents, such as doxorubicin. In a preferred embodiment, the antibody or
fragment is P4/D10. Other embodiments may concern methods of imaging,
detection or diagnosis of HIV infection in a subject using an anti-HIV
antibody or fragment conjugated to a diagnostic agent. In alternative
embodiments, a bispecific antibody with at least one binding site for an
HIV antigen and at least one binding site for a carrier mol. may be
administered, optionally followed by a clearing agent, followed by
administration of a carrier mol. conjugated to a therapeutic agent.

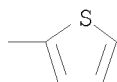
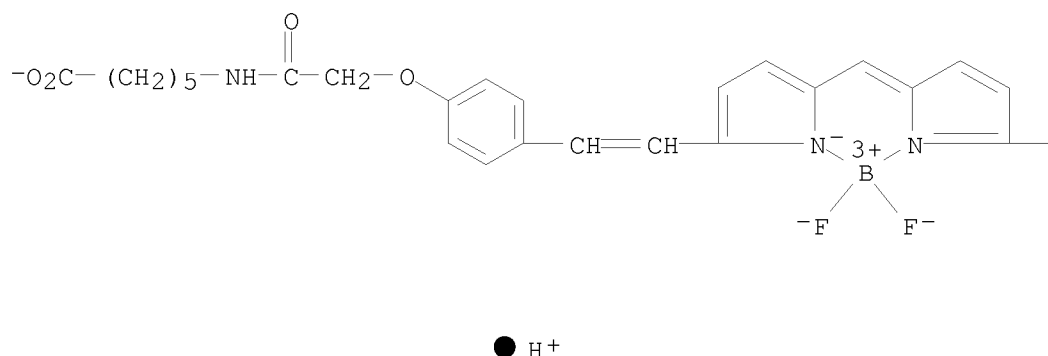
IT 268725-21-9D, BODIPY 630/650, conjugates with anti-HIV virus
antibodies

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
(Biological study); USES (Uses)

(imaging agents; diagnosis and treatment of HIV infection with
antibodies or antibody fragments conjugated with diagnostic and
therapeutic agents and combination with antiretroviral therapy)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
κN]methyl]-1H-pyrrol-2-yl-
κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
(T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L8 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:809760 CAPLUS

DOCUMENT NUMBER: 147:482184

TITLE: New HIV-protease assays applying self-quenching
peptide substrates in combination with time-resolved
fluorescence single-molecule spectroscopy

AUTHOR(S): Staudt, Thorsten Martin; Kraeusslich, Hans-Georg;
Knemeyer, Jens-Peter; Marme, Nicole

CORPORATE SOURCE: High Resolution Optical Microscopy, German Cancer
Research Center, Heidelberg, 69120, Germany

SOURCE: International Journal of Environmental Analytical
Chemistry (2007), 87(10-11), 731-743
CODEN: IJEAA3; ISSN: 0306-7319

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This work describes the optimization and adoption of an assay system for the Human Immunodeficiency Virus (HIV)-protease, whose inhibition plays a central role in HIV therapy. The HIV-protease, which is an essential enzyme during viral maturation, has a specific cleavage site of eight amino acid residues (SQNY*PIV). Adding two amino acid residues at the N-terminus and enclosing the resulting sequence by a dye-labeled lysine residue and a tryptophan residue leads to the substrate (K(dye)CGSQNY*PIVW) in which the fluorescence of the fluorophore is efficiently quenched by the intrinsic tryptophan due to a photoinduced electron transfer reaction. After cleavage of the substrate by the target enzyme, the dye and the tryptophan residue are separated, effecting a significant increase in fluorescence intensity. Measuring the fluorescence vs. time enables an online-monitoring of the enzyme activity. With this method, a HIV-PR concentration of 10⁻⁹ M is detectable within minutes,

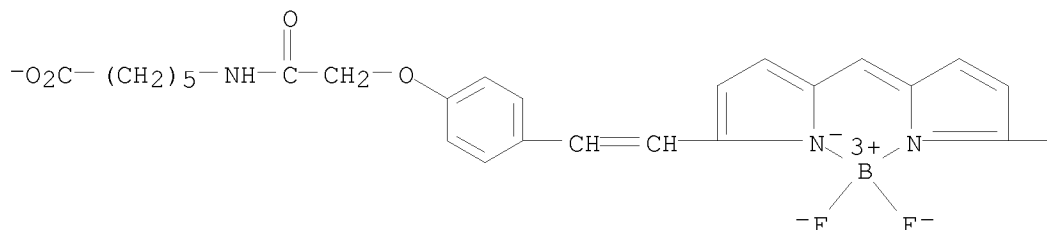
which is comparable with com. available assays using doubly labeled substrates based on a fluorescence resonance energy transfer. We were able to further increase the sensitivity to the subnanomolar range by using confocal single-mol. spectroscopy.

IT 268725-21-9D, N-terminal conjugation to HIV-1 protease peptide target with either MR121 or Bodipy 630/650 fluorescent dye
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (BODIPY 630/650; new HIV-protease assays applying self-quenching peptide substrates in combination with time-resolved fluorescence single-mol. spectroscopy)

RN 268725-21-9 CAPLUS

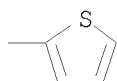
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



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PAGE 1-B



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:644428 CAPLUS

DOCUMENT NUMBER: 147:70976

TITLE: Particle-based analyte characterization using non-uniform particles with application to antibody determination

INVENTOR(S): Tyagarajan, Kamala; Fishwild, Dianne M.; King, David A.

PATENT ASSIGNEE(S): Guava Technologies, USA

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2007067680 | A2 | 20070614 | WO 2006-US46661 | 20061205 |
| WO 2007067680 | A3 | 20070823 | | |
| WO 2007067680 | A9 | 20080626 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| CA 2632261 | A1 | 20070614 | CA 2006-2632261 | 20061205 |
| EP 1957982 | A2 | 20080820 | EP 2006-848541 | 20061205 |
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| US 20090220989 | A1 | 20090903 | US 2008-96342 | 20080909 |
| PRIORITY APPLN. INFO.: | | | US 2005-742297P | P 20051205 |
| | | | US 2006-746054P | P 20060501 |
| | | | WO 2006-US46661 | W 20061205 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Methods for assaying a sample for an analyte are provided. In various embodiments, the methods comprise contacting a sample suspected of containing the analyte with a non-uniform particle comprising a capture mol., and further contacting the particle with a detection moiety comprising a label that permits detection of the analyte when associated with the particle. The methods may be performed to detect and/or quantitate analyte in the sample. In some embodiments, the methods may be performed in an automated manner, and may use an optical and/or cytometric apparatus for performing the method(s). The methods may further be performed with automated vessel-processing apparatus(es), such as plate loaders, plate washers, etc. Also provided are complexes containing the described materials formed by an assay of the invention, including excited state complexes. Kits useful for performing such methods are also provided.

IT 268725-21-9

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(BODIPY 630/650; particle-based analyte characterization using
non-uniform particles with application to antibody determination)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
κN]methyl]-1H-pyrrol-2-yl-
κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
(T-4)- (CA INDEX NAME)



| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| EP 1793003 | A1 | 20070606 | EP 2005-26117 | 20051130 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | |
| WO 2007062827 | A1 | 20070607 | WO 2006-EP11460 | 20061129 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
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KG, KZ, MD, RU, TJ, TM

EP 1954823 A1 20080813 EP 2006-818908 20061129

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: EP 2005-26117 A 20051130
WO 2006-EP11460 W 20061129

AB The present invention provides novel cancer diagnosis methods of the central nervous system, preferably oligodendrogliomas, by detecting the presence of CITED4-nucleic acid sequences in human tissues. The present invention furthermore provides a diagnostic method for determining the degree of

methylation of the promoter region of the CITED4 gene. A method for gene-therapy suitable for treating or preventing cancers of the central nervous system, preferably oligodendrogliomas, is provided. Finally, nucleic acid sequences, amino acid sequences, vectors, pharmaceutical compns. and kits, suitable in these inventive methods are disclosed herewith.

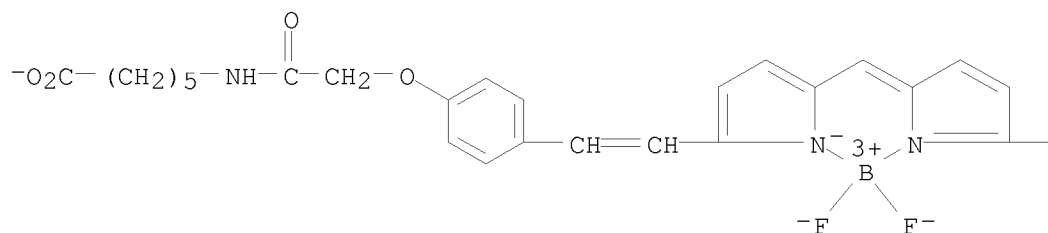
IT 268725-21-9, BODIPY 630/650

RL: BUU (Biological use, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protein and nucleotide sequences of human CITED4 gene as prognostic marker in oligodendroglial tumors)

RN 268725-21-9 CAPLUS

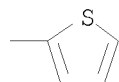
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



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PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2007:512048 CAPLUS
 DOCUMENT NUMBER: 146:494658
 TITLE: SBS (DNA sequencing by synthesis) using chemically cleavable 3'-o-allyl-dNTP-allyl-fluorophore fluorescent nucleotide analogues
 INVENTOR(S): Ju, Jingyue; Bi, Lanrong; Kim, Dae H.; Meng, Qingling
 PATENT ASSIGNEE(S): The Trustees of Columbia University In the City of New York, USA
 SOURCE: PCT Int. Appl., 52 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2007053719 | A2 | 20070510 | WO 2006-US42739 | 20061031 |
| WO 2007053719 | A3 | 20090423 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| GB 2446083 | A | 20080730 | GB 2008-8033 | 20061031 |
| US 20090263791 | A1 | 20091022 | US 2008-84457 | 20080430 |
| PRIORITY APPLN. INFO.: | | | US 2005-732040P | P 20051031 |
| | | | WO 2006-US42739 | W 20061031 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 146:494658

AB This invention provides a nucleotide analog comprising (i) a base selected from the group consisting of adenine, guanine, cytosine, thymine and uracil, (ii) a deoxyribose, (iii) an allyl moiety bound to the 3' -oxygen of the deoxyribose and (iv) a fluorophore bound to the base via an allyl linker. Also provided are the methods for SBS (DNA sequencing by synthesis) employing the nucleotide analogs. The nucleotide analogs are 3'-O-allyl-dGTP-iso-allyl-Bodipy-FL-510, 3'-O-allyl-dCTP-iso-allyl-Bodipy-650, 3'-O-allyl-dATP-iso-allyl-ROX, 3'-O-allyl-dUTP-iso-allyl-R6G, 3'-O-allyl-dGTP-allyl-Bodipy-FL-510, 3'-O-allyl-dCTP-allyl-Bodipy-650, 3'-O-allyl-dATP-allyl-ROX, and 3'-O-allyl-dUTP-allyl-R6G. The construction of a novel chemical cleavable fluorescent labeling system based on an allyl group is disclosed. The discovery permits fluorophore linker cleaving the 3'-O-allyl capping group removal in a single step, thus increasing SBS efficiency. Disclosed here is an allyl moiety that can be used successfully as a linker to tether a fluorophore to a 3'-O-allyl-capped nucleotide, thus forming a set of chemical cleavable reversible terminators, 3'-O-allyl-dNTP-allyl-fluorophores.

IT 268725-21-9, Bodipy 650

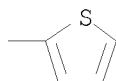
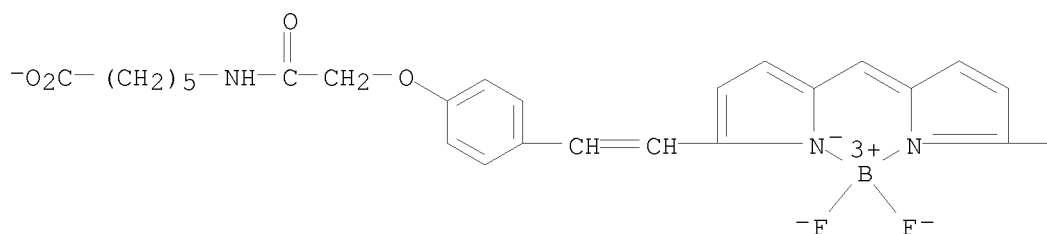
RL: RCT (Reactant); RACT (Reactant or reagent)

(SBS (DNA sequencing by synthesis) using chemical cleavable

3'-o-allyl-dNTP-allyl-fluorophore fluorescent nucleotide analogs)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),



L8 ANSWER 17 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:451263 CAPLUS

DOCUMENT NUMBER: 147:182143

TITLE: One-step rapid reverse transcription-PCR assay for detecting and typing dengue viruses with GC tail and induced fluorescence resonance energy transfer techniques for melting temperature and color multiplexing

AUTHOR(S): Lo, Constance L. H.; Yip, Shea Ping; Cheng, Peter K. C.; To, Tony S. S.; Lim, Wilina W. L.; Leung, Polly H. M.

CORPORATE SOURCE: Department of Health Technology and Informatics, The Hong Kong Polytechnic University, Hong Kong SAR, Peop. Rep. China

SOURCE: Clinical Chemistry (Washington, DC, United States) (2007), 53(4), 594-599

CODEN: CLCHAU; ISSN: 0009-9147

PUBLISHER: American Association for Clinical Chemistry

DOCUMENT TYPE: Journal

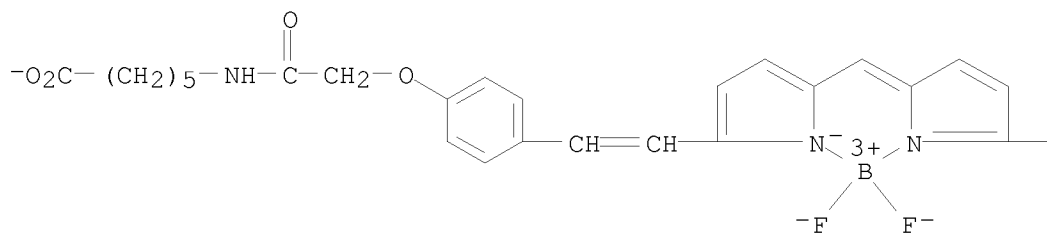
LANGUAGE: English

AB Dengue fever is an arthropod-borne infection caused by dengue viruses (DVs; DEN-1 to DEN-4). Early diagnosis is critical to prevent severe disease progression and the spreading of DV because no vaccine or specific treatment is available; therefore, a rapid and specific diagnostic assay capable of detecting and typing all serotypes would be ideal. We amplified RNA samples from all 4 DV serotypes and Japanese encephalitis virus with 4 serotype-specific forward primers and a universal species-specific reverse primer. DEN-1 and DEN-3 forward primers were labeled at their 5' ends with BODIPY 630/650 and Cy5.5, resp. DEN-1 and DEN-3 amplicons were detected by their characteristic emission generated from induced fluorescence resonance energy transfer. The presence of

DEN-2 and DEN-4 amplicons was indicated by SYBR Green I (SGI) signals at specific amplicon melting temps. (Tms). Fluorescence signals with specific emission wavelengths were obtained from DEN-1 and DEN-3. SGI melting profiles showed a Tm difference between DEN-2 and DEN-4 of 4.7°, which was sufficient for differentiating these 2 serotypes. The primers did not amplify the Japanese encephalitis virus. The detection limits of DEN-1 to DEN-4 were 1.64 + 10⁻⁴, 1.05 + 10⁻³, 8.15 + 10⁻⁴, and 5.80 + 10⁻³ plaque-forming units per reaction, resp. The assay had a dynamic range of 10³-10⁸ plaque-forming units/L and could be performed in 2 h. A single-tube, 1-step reverse transcription-PCR assay based on Tm and color multiplexing was developed for detecting and typing all 4 DV serotypes.

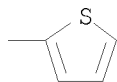
IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (one-step rapid reverse transcription-PCR assay for detecting and typing dengue viruses with GC tail and induced fluorescence resonance energy transfer techniques for melting temperature and color multiplexing)
 RN 268725-21-9 CAPLUS
 CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

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PAGE 1-B



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2007:438578 CAPLUS
 DOCUMENT NUMBER: 146:468443
 TITLE: Methods and compositions for generating bioactive assemblies of increased complexity and their therapeutic and diagnostic uses
 INVENTOR(S): Chang, Chien Hsing; Goldenberg, David M.; McBride,

PATENT ASSIGNEE(S): William J.; Rossi, Edmund A.
 SOURCE: IBC Pharmaceuticals, Inc., USA
 U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U.S.
 Ser. No. 391,584.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 42
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 20070086942 | A1 | 20070419 | US 2006-478021 | 20060629 |
| US 7534866 | B2 | 20090519 | | |
| US 20060228357 | A1 | 20061012 | US 2006-389358 | 20060324 |
| US 7550143 | B2 | 20090623 | | |
| WO 2006107617 | A2 | 20061012 | WO 2006-US10762 | 20060324 |
| WO 2006107617 | A3 | 20080814 | | |
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| US 7521056 | B2 | 20090421 | US 2006-391584 | 20060328 |
| US 20060228300 | A1 | 20061012 | | |
| WO 2006107786 | A2 | 20061012 | WO 2006-US12084 | 20060329 |
| WO 2006107786 | A3 | 20080807 | | |
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| US 20070087001 | A1 | 20070419 | US 2006-581287 | 20061016 |
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| AU 2006304418 | A1 | 20070426 | AU 2006-304418 | 20061016 |
| CA 2625992 | A1 | 20070426 | CA 2006-2625992 | 20061016 |
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JP 2009514813 T 20090409 JP 2008-536725 20061016
 CN 101534849 A 20090916 CN 2006-80039268 20061016
 US 20070140966 A1 20070621 US 2006-633729 20061205
 US 7527787 B2 20090505
 AU 2006330051 A1 20070705 AU 2006-330051 20061205
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EP 1959993 A2 20080827 EP 2006-848816 20061205
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CN 101374546 A 20090225 CN 2006-80052809 20061205
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 US 20100266496 A1 20101021 US 2010-789553 20100528

PRIORITY APPLN. INFO.:

US 2005-728292P P 20051019
 US 2005-751196P P 20051216
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 US 2006-389358 A2 20060324
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| WO | 2006-US40431 | W | 20061016 |
| US | 2006-864530P | P | 20061106 |
| US | 2006-633729 | A2 | 20061205 |
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| US | 2007-925408 | A2 | 20071026 |
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| US | 2007-961436 | A2 | 20071220 |
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| US | 2008-87463P | P | 20080808 |
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| US | 2008-104916P | P | 20081013 |
| US | 2008-119542P | P | 20081203 |
| US | 2008-343655 | A2 | 20081224 |
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| US | 2009-168668P | P | 20090413 |
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| US | 2009-644146 | A2 | 20091222 |
| US | 2010-731781 | A2 | 20100325 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention concerns methods and compns. for making and using bioactive assemblies of defined compns., which may have multiple functionalities and/or binding specificities. In particular embodiments, the bioactive assembly is formed using dock-and-lock (DNL) methodol., which takes advantage of the specific binding interaction between dimerization and docking domains (DDD) and anchoring domains (AD) to form the assembly. In various embodiments, one or more effectors may be attached to a DDD or AD sequence. Complementary AD or DDD sequences may be attached to an adaptor module that forms the core of the bioactive assembly, allowing formation of the assembly through the specific DDD/AD binding interactions. Such assemblies may be attached to a wide variety of effector moieties for treatment, detection and/or diagnosis of a disease, pathogen infection or other medical or veterinary condition.

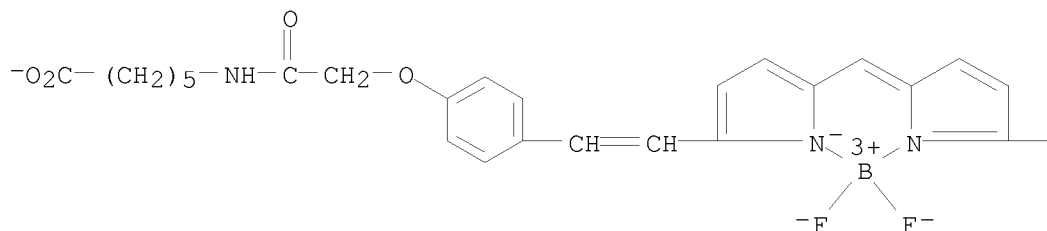
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RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

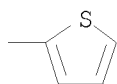
(BODIPY 630/650; with dimerization and docking domain constructs)

RN 268725-21-9 CAPLUS
 CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
 κ N]methyl]-1H-pyrrol-2-yl-
 κ N]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
 (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS
 RECORD (10 CITINGS)
 REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2006:1063108 CAPLUS
 DOCUMENT NUMBER: 145:417029
 TITLE: Methods for generating stably linked complexes
 composed of homodimers, homotetramers or dimers of
 dimers
 INVENTOR(S): Chang, Chien Hsing; Goldenberg, David M.; McBride,
 William J.; Rossi, Edmund A.
 PATENT ASSIGNEE(S): IBC Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 42
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2006107617 | A2 | 20061012 | WO 2006-US10762 | 20060324 |
| WO 2006107617 | A3 | 20080814 | | |

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| AU | 2006232920 | A1 | 20061012 | AU 2006-232920 20060324 |
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| US | 7534866 | B2 | 20090519 | |
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| CA | 2607056 | A1 | 20070426 | CA 2006-2607056 20060629 |
| WO | 2007046893 | A2 | 20070426 | WO 2006-US25499 20060629 |
| WO | 2007046893 | A3 | 20090423 | |
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| US | 20070087001 | A1 | 20070419 | US 2006-581287 20061016 |
| US | 7642239 | B2 | 20100105 | |
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| WO | 2007075270 | A2 | 20070705 | WO | 2006-US46367 | 20061205 |
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| WO | 2006-US12084 | A | 20060329 |
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| WO | 2006-US40431 | W | 20061016 |
| US | 2006-864530P | P | 20061106 |
| US | 2006-633729 | A2 | 20061205 |
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| US | 2007-925408 | A3 | 20071026 |
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| US 2008-104916P | P | 20081013 |
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

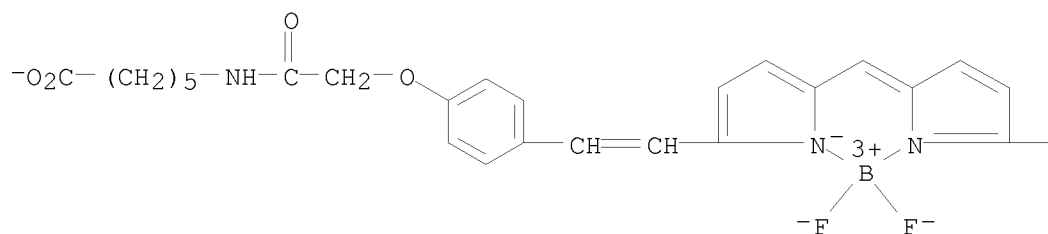
AB The authors disclose dimerization and docking domain (DDD) sequences for the generation of stably tethered structures of defined compns., which may have multiple functionalities and/or binding specificities. The tethered constructs may be virtually any mol. or structure, such as antibodies, antibody fragments, antibody analogs or mimetics, aptamers, binding peptides, fragments of binding proteins, known ligands for proteins or other mols., enzymes, detectable labels or tags, therapeutic agents, toxins, pharmaceuticals, cytokines, interleukins, interferons, radioisotopes, proteins, peptides, peptide mimetics, polynucleotides, RNAi, oligosaccharides, natural or synthetic polymeric substances, nanoparticles, quantum dots, organic or inorg. compds., etc. In one example, a fusion construct of a DDD sequence with an anti-CEA Fd fragment was prepared and shown to target colorectal cancer in a xenograft model.

IT 268725-21-9D, BODIPY 630/650, conjugates
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (BODIPY 630/650; with dimerization and docking domain constructs)

RN 268725-21-9 CAPLUS

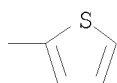
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PAGE 1-A



● H⁺

PAGE 1-B



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)

L8 ANSWER 20 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2006:577756 CAPLUS
DOCUMENT NUMBER: 145:41223
TITLE: Human papilloma virus (HPV) detection using nucleic acid probes, microbeads, and fluorescence-activated cell sorter (FACS)
INVENTOR(S): Poetter, Karl; Gould, Toby
PATENT ASSIGNEE(S): Genera Biosystems Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2006060872 | A1 | 20060615 | WO 2005-AU1865 | 20051209 |
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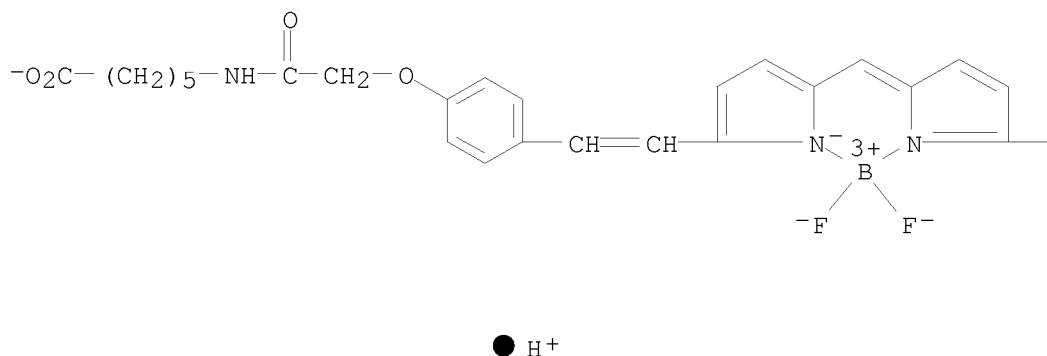
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates generally to the field of diagnostic and detection assays. More particularly, the invention provides methods, and reagents including subsets of beads for detecting the presence of, or distinguishing between, one or more human papillomavirus analytes in a human sample. Subsets of beads are homogeneous with respect to size, the beads within each subset are coupled to a nucleic acid capture probe which is specific for an HPV strain-specific region of the genome, and capture probes on each bead are labeled with the same label within a bead subset. Subsets of beads have labels with different fluorescent intensities to create a heterogeneous mixture of beads based on fluorescent intensity. The subset identity and therefore the strain of HPV is identifiable by flow cytometry based on bead size, fluorescent intensity, and probe sequence

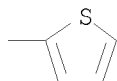
differences.

IT 268725-21-9, BoDipy 630/650
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(human papilloma virus (HPV) detection using nucleic acid capture probes, microbeads, and fluorescence-activated cell sorter (FACS))
RN 268725-21-9 CAPLUS
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:254141 CAPLUS

DOCUMENT NUMBER: 145:201843

TITLE: Utilization of substrate-induced quenching for screening targets promoting NADH and NADPH consumption
AUTHOR(S): Vazquez, Maria Jesus; Ashman, Stephen; Ramon, Fernando; Calvo, David; Bardera, Ana; Martin, J. Julio; Rudiger, Martin; Tew, David; Dominguez, Juan Manuel

CORPORATE SOURCE: Assay Development, GlaxoSmithKline, Madrid, Spain

SOURCE: Journal of Biomolecular Screening (2006), 11(1), 75-81
CODEN: JBISF3; ISSN: 1087-0571

PUBLISHER: Sage Publications

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Oxidation of reduced nicotinamide adenine dinucleotides is a common event for many biochem. reactions. However, its exploitation for ultrahigh-throughput screening purposes is not an easy task and is affected by various drawbacks. It is known that such nucleotides induce

quenching on the fluorescence of several dyes and that this quenching disappears with oxidation of the nucleotide. We have made use of this property to develop an assay for high-throughput screening with NADH- and NADPH-dependent reductases. Full screening campaigns have been run with excellent assay quality parameters, and interesting hits have been identified. The method is amenable to miniaturization and allows easy identification of false positives without needing extra secondary assays. Although it is based on monitoring substrate consumption, it is demonstrated that the effect of fractional conversion on assay sensitivity is negligible.

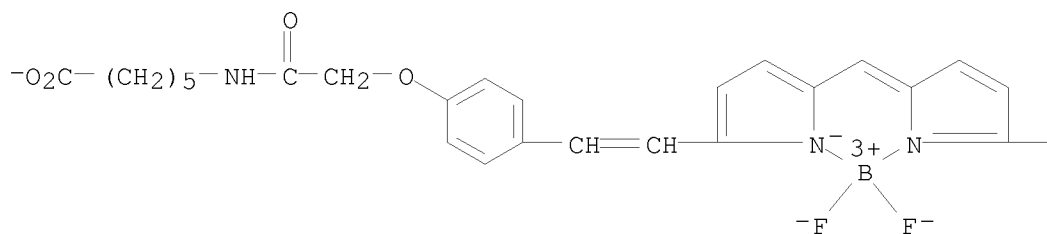
IT 268725-21-9, BODIPY 630/650

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(substrate induced quenching assay based on high throughput screening with NADH dependent reductases of resorufin was useful for target identification without needing extra secondary assays)

RN 268725-21-9 CAPLUS

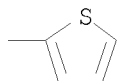
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

PAGE 1-B



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1314270 CAPLUS

DOCUMENT NUMBER: 144:46186

TITLE: Methods for extraction and labeling of microRNAs for use the analysis of their function

INVENTOR(S): Brown, David; Conrad, Rick; Devroe, Eric; Goldrick, Marianna; Keiger, Kerri; Labourier, Emmanuel; Moon, Ivonne; Powers, Patricia; Shelton, Jeffrey; Shingara,

PATENT ASSIGNEE(S): Jaclyn
 SOURCE: Ambion, Inc., USA
 PCT Int. Appl., 307 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2005118806 | A2 | 20051215 | WO 2005-US18826 | 20050531 |
| WO 2005118806 | A9 | 20060202 | | |
| WO 2005118806 | A3 | 20060824 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, US | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2005250432 | A1 | 20051215 | AU 2005-250432 | 20050531 |
| CA 2572450 | A1 | 20051215 | CA 2005-2572450 | 20050531 |
| EP 1771563 | A2 | 20070411 | EP 2005-804851 | 20050531 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| US 20070161004 | A1 | 20070712 | US 2005-141707 | 20050531 |
| JP 2008500837 | T | 20080117 | JP 2007-515415 | 20050531 |
| EP 2065466 | A2 | 20090603 | EP 2009-154092 | 20050531 |
| EP 2065466 | A3 | 20090909 | | |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| US 20080026951 | A1 | 20080131 | US 2007-837495 | 20070811 |
| US 20080171667 | A1 | 20080717 | US 2007-837498 | 20070811 |
| US 20080182245 | A1 | 20080731 | US 2007-837494 | 20070811 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2004-575743P | P 20040528 |
| | | | US 2005-649584P | P 20050203 |
| | | | EP 2005-804851 | A3 20050531 |
| | | | US 2005-141707 | A1 20050531 |
| | | | WO 2005-US18826 | W 20050531 |

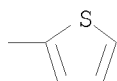
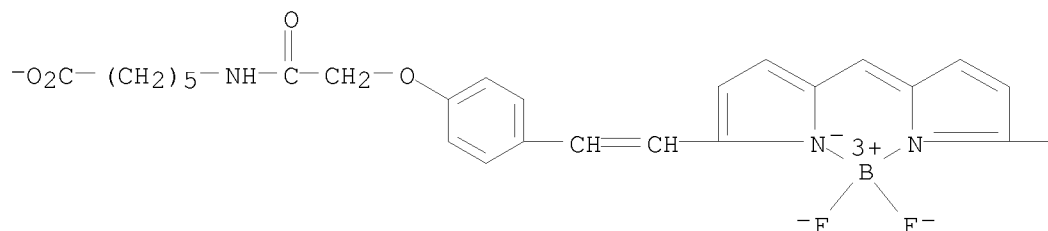
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Methods of isolating, enriching, and labeling miRNA mols. for use in arrays for the anal. of the roles and functions of miRNA in biol. processes are described. These methods may be used to generate miRNA profiles for therapeutic, diagnostic, and prognostic uses. A number of isolation methods are described. Identification of microRNAs showing altered levels in healthy and diseased tissue in a number of cancers is reported.

IT 268725-21-9, BODIPY 630/650
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (BODIPY 630/650, as label for microRNA; methods for extraction and labeling of microRNAs for use anal. of their function)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



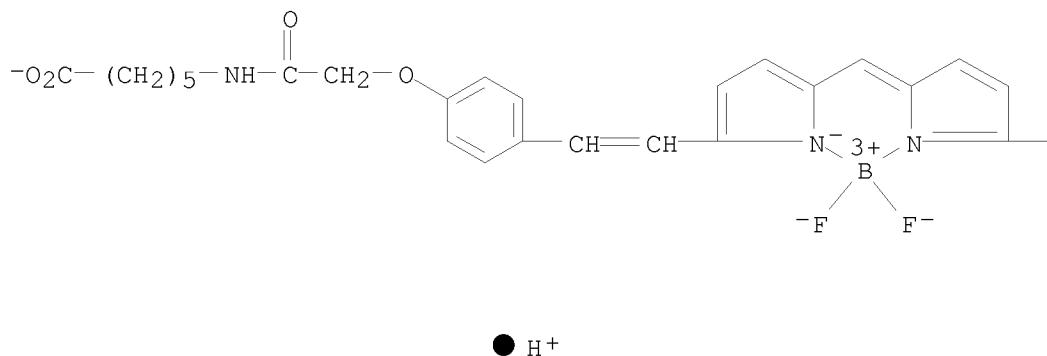
OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2005:1228815 CAPLUS
 DOCUMENT NUMBER: 144:483734
 TITLE: Parallel dual-color fluorescence cross-correlation spectroscopy using diffractive optical elements
 AUTHOR(S): Gosch, Michael; Blom, Hans; Anderegg, Sylvain; Korn, Kerstin; Thyberg, Per; Wells, Mona; Lasser, Theo; Rigler, Rudolf; Magnusson, Anders; Hard, Sverker
 CORPORATE SOURCE: Department of Medical Biochemistry and Biophysics, Karolinska Institute, Stockholm, SE- 17177, Swed.
 SOURCE: Journal of Biomedical Optics (2005), 10(5), 054008/1-054008/7
 CODEN: JBOPFO; ISSN: 1083-3668
 PUBLISHER: SPIE-The International Society for Optical Engineering
 DOCUMENT TYPE: Journal
 LANGUAGE: English

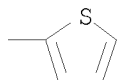
AB Dual-color cross-correlation spectroscopy allows the detection and quantification of labeled biomols. at ultra-low concns., whereby the sensitivity of the assay correlates with the measurement time. We now describe a parallel multifocal dual-color spectroscopic configuration employing multiple avalanche photodiodes and hardware correlators. Cross-correlation curves are obtained from several dual-color excitation foci simultaneously. Multifocal dual-color excitation is achieved by splitting each of two laser beams (488 and 633 nm) into four sub-beams with the help of two 2+2 fan-out diffractive optical elements (DOEs), and subsequent superposition of the two sets of four foci. The fluorescence emission from double-labeled biomols. is detected by two 2+2 fiber arrays.

IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (parallel dual-color fluorescence cross-correlation spectroscopy using
 diffractive optical elements)
 RN 268725-21-9 CAPLUS
 CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
 κN]methyl]-1H-pyrrol-2-yl-
 κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
 (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



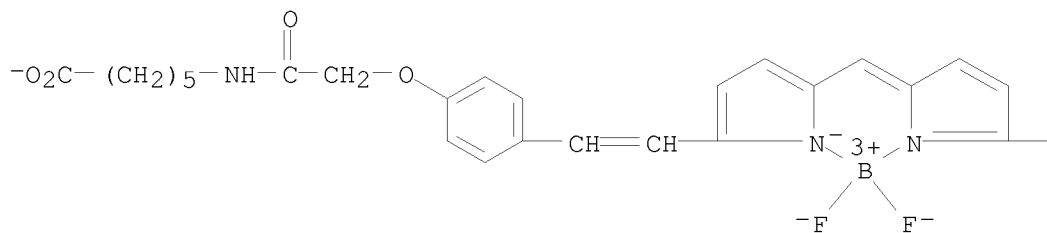
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2005:812826 CAPLUS
 DOCUMENT NUMBER: 144:249745
 TITLE: Detection and identification of nucleic acid
 engineered fluorescent labels in submicrometre fluidic
 channels
 AUTHOR(S): Stavis, Samuel M.; Edel, Joshua B.; Li, Yougen;
 Samiee, Kevan T.; Luo, Dan; Craighead, Harold G.
 CORPORATE SOURCE: School of Applied and Engineering Physics, Cornell
 University, Ithaca, NY, 14853, USA
 SOURCE: Nanotechnology (2005), 16(7), 314-323
 CODEN: NNOTER; ISSN: 0957-4484
 PUBLISHER: Institute of Physics Publishing
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Nucleic acid engineers have created nanoscale fluorescent labels that are
 uniquely identifiable by the number of conjugated fluorophores, and with
 binding characteristics that permit recognition of individual specific
 biomols. The viability of this technol. for use in multi-analyte
 homogeneous assays depends on the ability to optically detect individual

labels, and distinguish the fluorescence emission of each label. The authors describe the use of fluidic channels with submicrometre dimensions to rapidly detect individual labels in solution. Labels with small differences in fluorophore composition were differentiated with varying degrees of accuracy. Labels were synthesized at the mol. level from dendrimer-like DNA, with the identity encoded into the number of Alexa Fluor 488 and BODIPY 630/650 fluorophores conjugated with the structure. To explore the decoding resolution limit, labels with a single fluorophore of each color were detected, and were found to be distinguishable as a group, but not individually, from labels with one addnl. red fluorophore. Labels with one green and three red fluorophores were individually distinguishable with greater than 80% accuracy from labels with one red and three green fluorophores. Photon counting histograms were analyzed to differentiate the various labels, and fluorescence correlation spectroscopy was used to measure their mobilities. Fluidic channels were fabricated in fused silica with a 500 nm square cross section, resulting in a focal volume of approx. 500 al. Because the entire channel width was illuminated, every fluorescent mol. in solution passing through the channel was uniformly excited and analyzed. Flow control enabled a balance of rapid data acquisition and efficient fluorescence collection with these nanoscale systems.

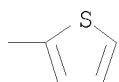
IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (BODIPY 630/650; submicrometre dimensional fluidic channels for
 nanoscale detection of individual fluorophores labeling nucleic acids)
 RN 268725-21-9 CAPLUS
 CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
 κN]methyl]-1H-pyrrol-2-yl-
 κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
 (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

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OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)
 REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS

L8 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:620824 CAPLUS

DOCUMENT NUMBER: 144:327168

TITLE: In situ and non-invasive detection of specific bacterial species in oral biofilms using fluorescently labeled monoclonal antibodies

AUTHOR(S): Gu, Fang; Lux, Renate; Du-Thumm, Laurence; Stokes, Ivy; Kreth, Jens; Anderson, Maxwell H.; Wong, David T.; Wolinsky, Lawrence; Sullivan, Richard; Shi, Wenyan

CORPORATE SOURCE: School of Dentistry and Dental Research Institute, University of California, Los Angeles, CA, 90095-1668, USA

SOURCE: Journal of Microbiological Methods (2005), 62(2), 145-160

CODEN: JMIMDQ; ISSN: 0167-7012

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Noninvasive in situ detection of suspected cariogenic bacterial species within dental biofilms could facilitate monitoring of the dynamic change of oral microbial flora and assist in the assessment of the treatment efficacy of therapeutic agents. In this study, we explore the possibility to use three well-characterized monoclonal antibodies (MAbs) against *Streptococcus mutans*, *Actinomyces naeslundii*, and *Lactobacillus casei* to identify these three important members of the oral microbial community in the complex environment of oral biofilms. These MAbs, which were conjugated to different fluorescent labels and visualized with confocal laser scanning microscopy (CLSM), proved to be an useful tool to identify the three species of interest (*S. mutans*, *A. naeslundii*, and *L. casei*) under various exptl. conditions including in vitro and in vivo derived oral biofilms. Manifold addition of the MAbs on consecutive days did not alter the biofilm structure thus allowing monitoring of the same biofilm over extended time periods. Using this MAb-based method the effect of sucrose challenge on the biofilm composition and the distribution of *S. mutans*, *A. naeslundii*, and *L. casei* were examined. *S. mutans* was the predominant species under the various biofilm conditions tested. These studies indicate that MAbs based bacterial detection with CLSM is a versatile tool which permits new insights into the ecol. of oral biofilm development.

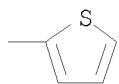
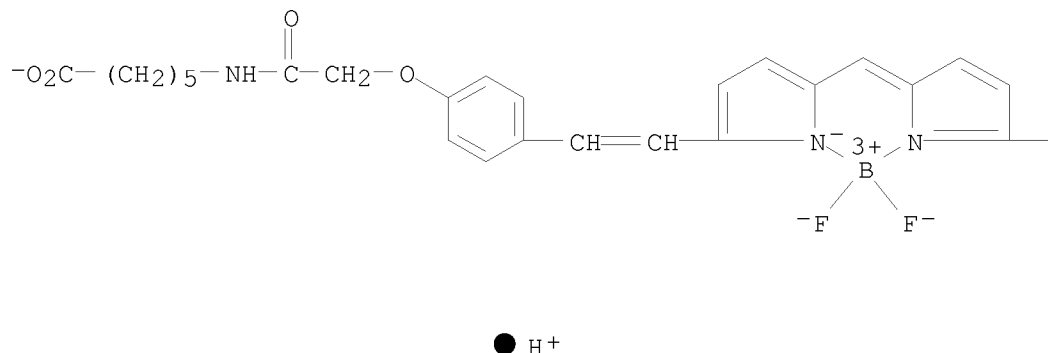
IT 268725-21-9D, Bodipy 630/650, SWLA1 monoclonal antibody conjugate

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(in situ and non-invasive detection of specific bacterial species in oral biofilms using fluorescently labeled monoclonal antibodies and effect of sucrose challenge on biofilm composition and distribution of bacterial species)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:457585 CAPLUS

DOCUMENT NUMBER: 144:116714

TITLE: High-resolution colocalization of single molecules within the resolution gap of far-field microscopy

AUTHOR(S): Heinlein, Thomas; Biebricher, Andreas; Schlueter, Pia; Roth, Christian michael; Herten, Dirk-Peter; Wolfrum, Juergen; Heilemann, Mike; Mueller, Christian; Tinnefeld, Philip; Sauer, Markus

CORPORATE SOURCE: Inst. of Phys. Chem., Univ. of Heidelberg, Heidelberg, 69120, Germany

SOURCE: ChemPhysChem (2005), 6(5), 949-955

CODEN: CPCHFT; ISSN: 1439-4235

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To obtain detailed information about the 3-dimensional (3D) organization of small biomol. assemblies with a size of <100 nm, advanced techniques are required that enable the determination of absolute 3D positions and distances

between individual fluorophores well below the resolution limit of conventional light microscopy. Spectrally resolved fluorescence lifetime imaging microscopy (SFLIM) can provide significant contributions and allow one to determine distances between conventional individual fluorophores (Bodipy 630/650 and Cy5.5) that are <20 nm apart. Advantage is taken of fluorescent dyes (Cy5.5 and Bodipy 630/650) that can be efficiently excited by a single pulsed diode laser emitting at 635 nm but differing in their fluorescence lifetime and emission maximum. The potential of the method for ultrahigh colocalization studies is demonstrated by measuring the

end-to-end distance between single fluorophores separated by double-stranded DNA of various lengths. Combining SFLIM with polarization-modulated excitation allows one to obtain, simultaneously, information about the relative orientation of fluorophores. The environment-dependent photophysics of conventional fluorophores, i.e., photostability, blinking pattern, and the tendency to enter irreversible nonfluorescent states, sets certain limitations to their in vitro and in vivo applications.

IT 268725-21-9, Bodipy 630/650

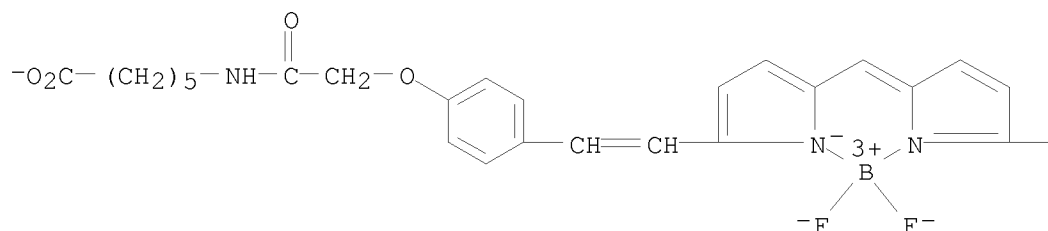
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(high-resolution colocalization within resolution gap of far-field microscopy of single mols. of)

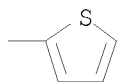
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:34504 CAPLUS

DOCUMENT NUMBER: 142:128578

TITLE: Detecting 5.8S rDNA by real time PCR and nucleic acid hybridization for diagnosis of mould infection

INVENTOR(S): Han, Xiang-yang; Tarrand, Jeffrey J.; Pham, Audrey S.; May, Gregory S.

PATENT ASSIGNEE(S): Board of Regents, the University of Texas, USA

SOURCE: U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U. S. Ser. No. 672,300.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 20050009051 | A1 | 20050113 | US 2004-829661 | 20040422 |
| US 20050048509 | A1 | 20050303 | US 2003-672300 | 20030926 |
| PRIORITY APPLN. INFO.: | | | US 2002-414008P | P 20020927 |
| | | | US 2003-672300 | A2 20030926 |

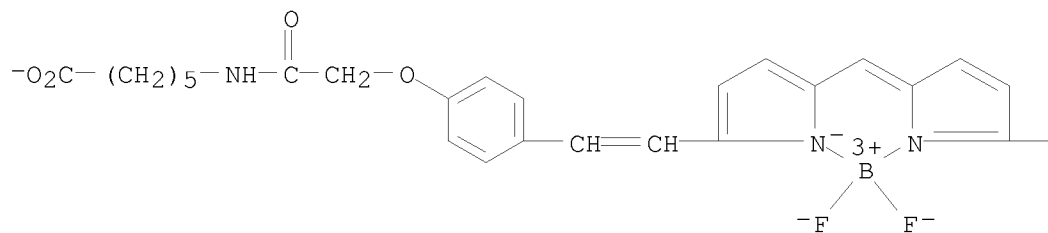
AB The present invention provides methods for detecting the presence of pathogenic molds in biol. samples that are based on amplification of mold 5.8S rRNA genes of Fusarium, Aspergillus and Scedosporium. The methods may further comprise quantitating and real time detection of the mold. The methods of the invention are highly specific and do not co-amplify human or other yeast nucleic acids. The methods of the invention are also extremely sensitive. The invention also provides the DNA sequence of 5.8S rDNA from Fusarium, Aspergillus and Scedosporium.

IT 268725-21-9D, Bodipy 630/650, probe conjugate
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(detecting 5.8S rDNA by real time PCR and nucleic acid hybridization for diagnosis of mold infection)

RN 268725-21-9 CAPLUS

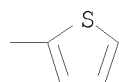
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

PAGE 1-B



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 28 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:831141 CAPLUS

DOCUMENT NUMBER: 142:370173

TITLE: Affinity of single *S. cerevisiae* cells to 2-NBDglucose under changing substrate concentrations

AUTHOR(S): Achilles, J.; Mueller, S.; Bley, T.; Babel, W.

CORPORATE SOURCE: Department of Environmental Microbiology, Centre for Environmental Research, Leipzig, Germany

SOURCE: Cytometry, Part A (2004), 61A(1), 88-98

CODEN: CPAYAV

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: *Saccharomyces cerevisiae* is a widely employed microorganism in biotechnol. processes. Since proliferation and product formation depend on the capacity of the cell to access and metabolize a carbon source, a technique was developed to enable for analyzing the *S. cerevisiae* H155 cells' affinity to extracellular glucose concns. Methods: The fluorescent glucose analog 2-NBDglucose was employed as a functional parameter to analyze the cells' affinity to glucose. Structural parameters (proliferation, neutral lipid content, granularity, and cell size) were also investigated. Cells were grown both in batches and in chemostat regimes. Results: The 2-NBDglucose uptake in individual cells proceeds in a time- and concentration-dependent manner and is affected by respiratory and respirofermentative modes of growth. The process is inhibited by D-glucose, D-fructose, D-mannose, and sucrose, but not L-glucose, D-galactose or lactose; maltose is a weak inhibitor. The affinity of the individual cells to 2-NBDglucose was found to be high at low extracellular glucose concns., and weak at high concns. An addnl., underlying pattern in the cells' affinity to glucose was detected, illustrated by the recurrent appearance of two subpopulations showing distinctly differing quantities of this substrate. Conclusions: A multiparameter flow cytometry approach is presented that enables, for the first time, for anal. of the affinity of individual *S. cerevisiae* cells to glucose. Besides the adjustment of the yeast cell metabolism to extracellular glucose concns. by altering their affinity to glucose, at least one further mechanism is clearly involved. Two subpopulations of cells were resolved, with different affinities not correlated with other cellular parameters measured.

IT 268725-21-9D, BODIPY 630/650, Con A conjugates

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(Bodipy 630/650; affinity of single *S. cerevisiae* cells to 2-NBDglucose under changing substrate concns.)

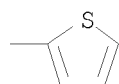
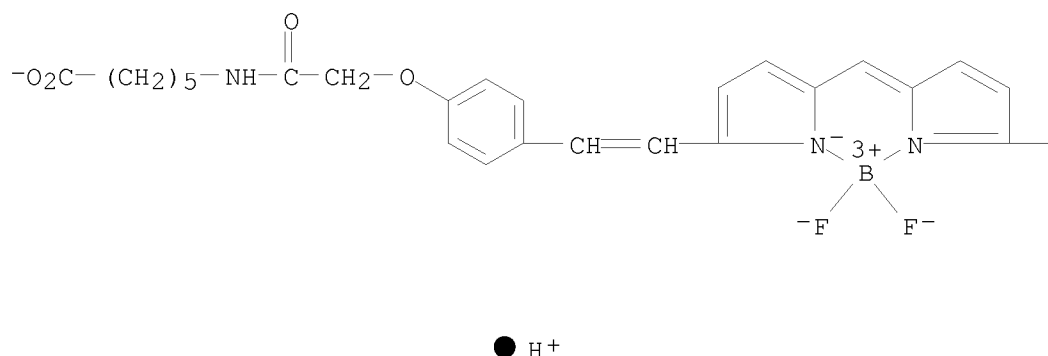
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-

κN]methyl]-1H-pyrrol-2-yl-

κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),

(T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:515786 CAPLUS

DOCUMENT NUMBER: 141:67869

TITLE: Preparation and biomedical use of magnetic polymer particles

INVENTOR(S): Fonnum, Geir; Modahl, Grete Irene; Stene, Torkel; Molteberg, Astrid Evenrod; Finne, Erling Sigurd

PATENT ASSIGNEE(S): Dynal Biotech Asa, Norway; Weng, Ellen; Campbell, Neil

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2004053490 | A1 | 20040624 | WO 2003-GB5390 | 20031211 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2507625 | A1 | 20040624 | CA 2003-2507625 | 20031211 |

| | | | | |
|---|----|----------|------------------|-------------|
| AU 2003288454 | A1 | 20040630 | AU 2003-288454 | 20031211 |
| EP 1573325 | A1 | 20050914 | EP 2003-780374 | 20031211 |
| EP 1573325 | B1 | 20090401 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1732386 | A | 20060208 | CN 2003-80107827 | 20031211 |
| CN 100414297 | C | 20080827 | | |
| JP 2006511935 | T | 20060406 | JP 2004-558832 | 20031211 |
| CN 101382546 | A | 20090311 | CN 2008-10136135 | 20031211 |
| AT 427491 | T | 20090415 | AT 2003-780374 | 20031211 |
| EP 2051075 | A1 | 20090422 | EP 2009-151402 | 20031211 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR | | | | |
| IN 2005DN02226 | A | 20070427 | IN 2005-DN2226 | 20050525 |
| IN 221649 | A1 | 20080801 | | |
| US 20060131542 | A1 | 20060622 | US 2005-536230 | 20051020 |
| US 20100087327 | A1 | 20100408 | US 2009-486590 | 20090617 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | GB 2002-28914 | A 20021211 |
| | | | CN 2003-80107827 | A3 20031211 |
| | | | EP 2003-780374 | A3 20031211 |
| | | | WO 2003-GB5390 | W 20031211 |
| | | | US 2005-536230 | B1 20051020 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB This article discloses a coated magnetic particle comprising an optionally porous magnetic polymer particle of a matrix polymer, said polymer particle having on a surface and/or in the pores thereof superparamagnetic crystals, said coated particle having a coat formed of a coating polymer, wherein said coated magnetic particle is essentially non-autofluorescent.

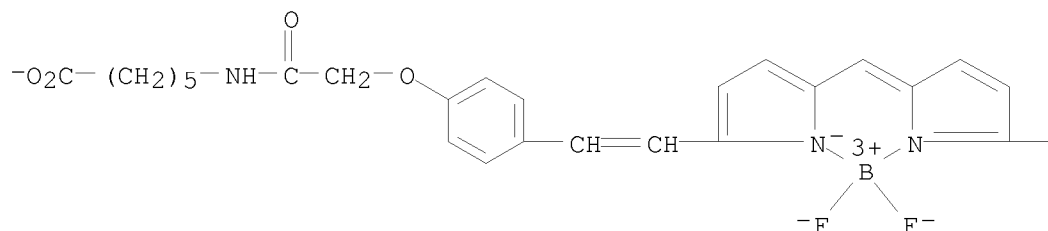
IT 268725-21-9, Bodipy 630/650

RL: NUU (Other use, unclassified); USES (Uses)
(particles)

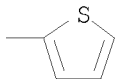
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



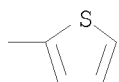
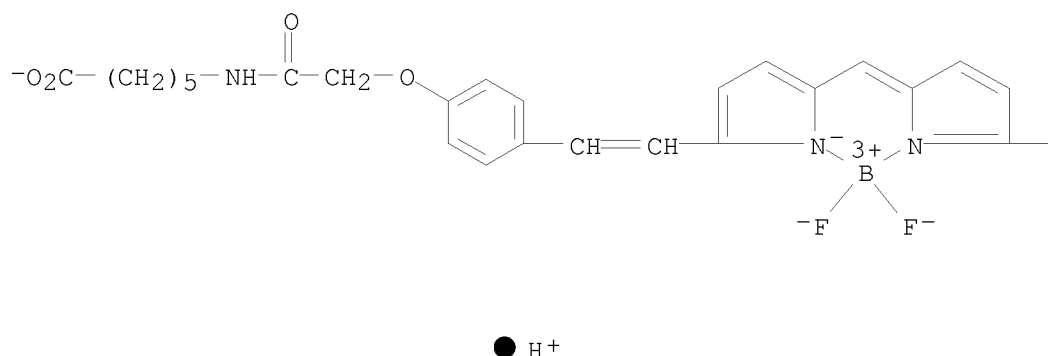
● H⁺



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(5 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:287903 CAPLUS
DOCUMENT NUMBER: 140:298597
TITLE: Methods for diagnosis of invasive mold infection using
real time quantitative PCR
INVENTOR(S): Han, Xiang-yang; Tarrand, Jeffrey J.
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2004029216 | A2 | 20040408 | WO 2003-US30541 | 20030926 |
| WO 2004029216 | A3 | 20050224 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003282878 | A1 | 20040419 | AU 2003-282878 | 20030926 |
| PRIORITY APPLN. INFO.: | | | US 2002-414008P | P 20020927 |
| | | | WO 2003-US30541 | W 20030926 |
| AB | The present invention provides methods for detecting the presence of invasive pathogenic molds using real time quant. PCR. The methods of the invention are highly specific and detect 5.8S rRNA genes of Fusarium, Aspergillus and Scedosporium. | | | |
| IT | 268725-21-9D, Bodipy 630/650, probe conjugate RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (diagnosis of invasive mold infection by real-time quant. PCR) | | | |
| RN | 268725-21-9 CAPLUS | | | |
| CN | Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME) | | | |



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2003:861172 CAPLUS
 DOCUMENT NUMBER: 140:55848
 TITLE: Inter- and Intramolecular Fluorescence Quenching of Organic Dyes by Tryptophan
 AUTHOR(S): Marme, Nicole; Knemeyer, Jens-Peter; Sauer, Markus; Wolfrum, Juergen
 CORPORATE SOURCE: Physikalisch-Chemisches Institut, Universitaet Heidelberg, Heidelberg, 69120, Germany
 SOURCE: Bioconjugate Chemistry (2003), 14(6), 1133-1139
 CODEN: BCCHE; ISSN: 1043-1802
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Steady-state and time-resolved fluorescence measurements were performed to elucidate the fluorescence quenching of oxazine, rhodamine, carbocyanine, and bora-diaza-indacene dyes by amino acids. Among the natural amino acids, tryptophan exhibits the most pronounced quenching efficiency. Especially, the red-absorbing dyes ATTO 655, ATTO 680, and the oxazine derivative MR 121 are strongly quenched almost exclusively by tryptophan due to the formation of weak or nonfluorescent ground-state complexes with association consts., Kass., ranging from 96 to 206 M⁻¹. Rhodamine, fluorescein, and bora-diaza-indacene derivs. that absorb at shorter wavelengths are also quenched substantially by tyrosine residues. The quenching of carbocyanine dyes, such as Cy5, and Alexa 647 by amino acids can be almost neglected. While quenching of ATTO 655, ATTO 680, and the oxazine derivative MR 121 by tryptophan is dominated by static quenching, dynamic quenching is more efficient for the two bora-diaza-indacene dyes Bodipy FL and Bodipy 630/650. Labeling of the dyes to tryptophan, tryptophan-containing peptides, and proteins (streptavidin) demonstrates that knowledge of these fluorescence quenching processes is crucial for the development of

fluorescence-based diagnostic assays. Changes in the fluorescence quantum yield of dye-labeled peptides and proteins might be used advantageously for the quantification of proteases and specific binding partners.

IT 268725-21-9, BODIPY 630/650

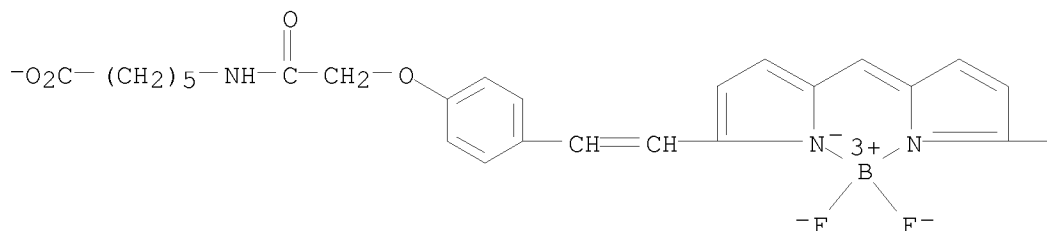
RL: PRP (Properties)

(BODIPY 630/650; inter- and intramol. fluorescence quenching of organic dyes by tryptophan)

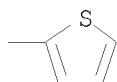
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



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OS.CITING REF COUNT: 78 THERE ARE 78 CAPLUS RECORDS THAT CITE THIS RECORD (79 CITINGS)
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 32 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2003:664403 CAPLUS

DOCUMENT NUMBER: 139:371543

TITLE: Detection of multiple fluorescent labels using superconducting tunnel junction detectors

AUTHOR(S): Fraser, G. W.; Heslop-Harrison, J. S.; Schwarzacher, T.; Holland, A. D.; Verhoeve, P.; Peacock, A.

CORPORATE SOURCE: Department of Physics and Astronomy, Space Research Centre, University of Leicester, Leicester, LE1 7RH, UK

SOURCE: Review of Scientific Instruments (2003), 74(9), 4140-4144

CODEN: RSINAK; ISSN: 0034-6748

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

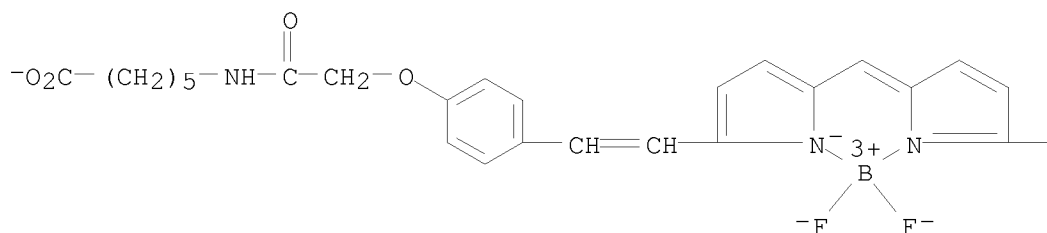
AB Cryogenically cooled, photon counting superconducting tunnel junctions (STJs) can be used to simultaneously record the optical spectra from multiple biol. fluorochromes. Measurements with a single-pixel Ta STJ with a wavelength resolving power $R = \lambda/\Delta\lambda$ of .apprx.10 confirm the expected sensitivity advantage with respect to the photomultiplier-based detectors commonly used to record signals from microarrays and other fluorescent biol. systems.

IT 268725-21-9, BODIPY 630/650
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
 (Bodipy 630/650; multiple fluorescent labels detection using superconducting tunnel junction detectors)

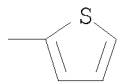
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 33 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2003:656877 CAPLUS

DOCUMENT NUMBER: 139:192442

TITLE: Diagnostic methods and probes for detecting Chlamydia species in clinical samples using quantitative RT-PCR

INVENTOR(S): Kaltenboeck, Bernhard

PATENT ASSIGNEE(S): Auburn University, USA

SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2003068918 | A2 | 20030821 | WO 2003-US4164 | 20030211 |
| WO 2003068918 | A3 | 20040108 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003209127 | A1 | 20030904 | AU 2003-209127 | 20030211 |
| US 20030219788 | A1 | 20031127 | US 2003-364839 | 20030211 |
| US 7252937 | B2 | 20070807 | | |
| EP 1481086 | A2 | 20041201 | EP 2003-707859 | 20030211 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| PRIORITY APPLN. INFO.: | | | US 2002-356033P | P 20020211 |
| | | | WO 2003-US4164 | W 20030211 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

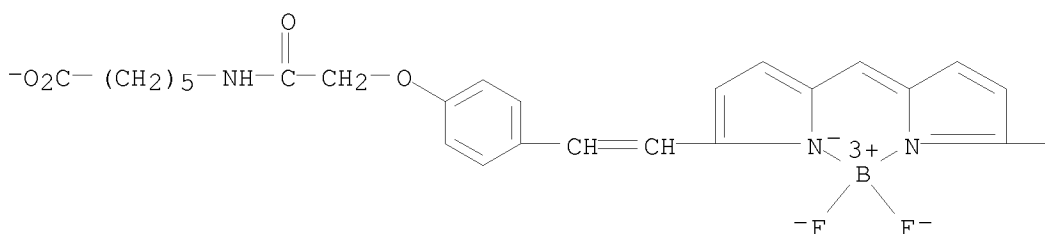
AB Diagnostic methods and probes for detecting Chlamydia species in clin. samples using quant. RT-PCR are provided. These methods are capable of detecting nucleic acids in a sample volume of 5 μ L and of quantifying chlamydial nucleic acids with high accuracy. Desirably, these methods employ a single tube format coupled with real-time fluorescent detection of amplicons. The use of specific hybridization probes with qPCR amplification provides the ability for identification of individual species or strains of microorganisms.

IT 268725-21-9D, BODIPY 630/650, probe conjugate
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Bodipy 630/650; diagnostic methods and probes for detecting Chlamydia species in clin. samples using quant. RT-PCR)

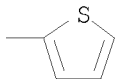
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene- κ N]methyl]-1H-pyrrol-2-yl- κ N]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 34 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2003:633876 CAPLUS

DOCUMENT NUMBER: 139:174807

TITLE: Substituted 4,4-difluoro-4-bora-3a,
4a-diaza-s-indacene compounds for 8-color DNA
sequencing

INVENTOR(S): Metzker, Michael L.

PATENT ASSIGNEE(S): Baylor College of Medicine, USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2003066812 | A2 | 20030814 | WO 2003-US3385 | 20030205 |
| WO 2003066812 | A3 | 20040226 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003244370 | A1 | 20030902 | AU 2003-244370 | 20030205 |
| US 20030180769 | A1 | 20030925 | US 2003-358478 | 20030205 |
| PRIORITY APPLN. INFO.: | | | US 2002-355456P | P 20020205 |
| | | | WO 2003-US3385 | W 20030205 |

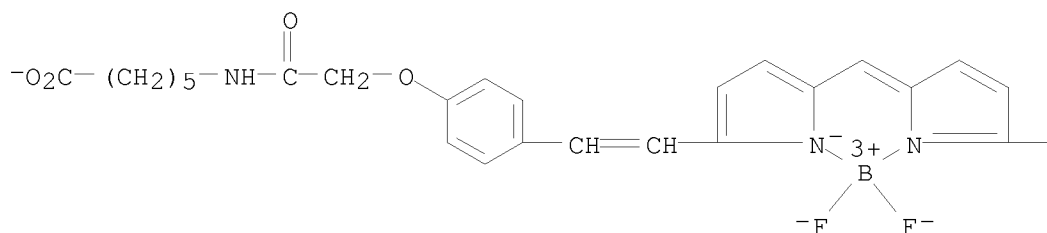
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention describes a method of 8-color sequencing. Specifically, the present invention is directed to sequencing a sense strand and an antisense strand of a double-stranded polynucleotide comprising forming eight polynucleotide products differentially labeled with eight characteristic fluorophores, wherein said eight fluorophores comprise a set; and identifying each of the eight polynucleotide products by a fluorescence or an absorption spectrum of the characteristic fluorophores. Thus, new substituted 4,4-difluoro-4-bora-3a,4a-diaza-s-indacenes (BODIPY fluorophores) are described which provide a bathochromic shift relative to previously described BODIPY compds. and an improvement in spectral resolution such that a set of 8 spectrally resolvable BODIPY compds. useful for simultaneous

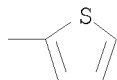
detection of forward and reverse DNA sequencing reactions are provided. The new compds. are BODIPY 410 (4,4-difluoro-5,7-dimethyl-4-bora-3a,4a-diaza-s-indacene-3-styryloxyacetate), BODIPY 411 (4,4-difluoro-5-phenyl-4-bora-3a,4a-diaza-s-indacene-3-styryloxyacetate), and BODIPY 542/563 (4,4-difluoro-5-(4-methoxyphenyl)-4-bora-3a,4a-diaza-s-indacene-3-propionic acid).

IT 268725-21-9P, BODIPY 630/650
 RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (BODIPY 630/650; substituted 4,4-difluoro-4-bora-3a,4a-diaza-s-indacene compds. for 8-color DNA sequencing)
 RN 268725-21-9 CAPLUS
 CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2002:898772 CAPLUS
 DOCUMENT NUMBER: 138:103114
 TITLE: Spectroscopic study and evaluation of red-absorbing fluorescent dyes
 AUTHOR(S): Buschmann, Volker; Weston, Kenneth D.; Sauer, Markus
 CORPORATE SOURCE: Physikalisch-Chemisches Institut, Universitaet Heidelberg, Heidelberg, 69120, Germany
 SOURCE: Bioconjugate Chemistry (2003), 14(1), 195-204
 CODEN: BCCHE; ISSN: 1043-1802
 PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The spectroscopic characteristics (absorption, emission, and fluorescence lifetime) of 13 com. available red-absorbing fluorescent dyes were studied under a variety of conditions. The dyes included in this study are Alexa 647, ATTO 655, ATTO 680, Bodipy 630/650, Cy 5, Cy 5.5, DiD, DY 630, DY 635, DY 640, DY 650, DY 655, and EVOblue 30. The thorough characterization of this class of dyes will facilitate selection of the appropriate red-absorbing fluorescent labels for applications in fluorescence assays. The influences of polarity, viscosity, and the addition of detergent (Tween20) on the spectroscopic properties were investigated, and fluorescence correlation spectroscopy (FCS) was utilized to assess the photophys. properties of the dyes under high excitation conditions. The dyes can be classified into groups based on the results presented. For example, while the fluorescence quantum yield of ATTO 655, ATTO 680, and EVOblue 30 is primarily controlled by the polarity of the surrounding medium, more hydrophobic and structurally flexible dyes of the DY-family are strongly influenced by the viscosity of the medium and the addition of detergents. Covalent binding of the dyes to biotin and subsequent addition of streptavidin results in reversible fluorescence quenching or changes in the relaxation time of other photophys. processes of some dyes, most likely due to interactions with tryptophan residues in the streptavidin binding site.

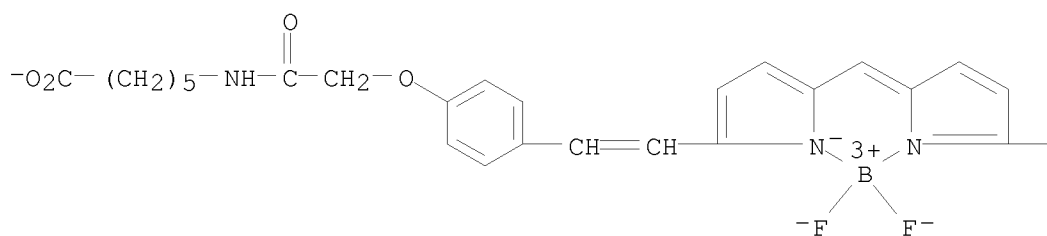
IT 268725-21-9, BODIPY 630/650

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (BODIPY 630/650; spectroscopic study and evaluation of red-absorbing fluorescent dyes)

RN 268725-21-9 CAPLUS

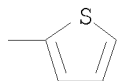
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

PAGE 1-B



OS.CITING REF COUNT: 86 THERE ARE 86 CAPLUS RECORDS THAT CITE THIS

RECORD (86 CITINGS)
REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 36 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:778091 CAPLUS
DOCUMENT NUMBER: 137:291280
TITLE: Modular molecular clasps
INVENTOR(S): Rizzuto, Carlo Dante; Afeyan, Noubar Boghos; Lee,
Frank Don; Church, George Mcdonald; Das Gupta,
Ruchira; Schwartz, John Jacob; Zhang, Bin; Lugovskoy,
Alexey Alexandrovich
PATENT ASSIGNEE(S): Engeneos, Inc., USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2002079387 | A2 | 20021010 | WO 2002-US10171 | 20020328 |
| WO 2002079387 | A3 | 20030220 | | |
| WO 2002079387 | A9 | 20040506 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 20020192721 | A1 | 20021219 | US 2001-995847 | 20011128 |
| AU 2002311794 | A1 | 20021015 | AU 2002-311794 | 20020328 |
| US 20070276129 | A1 | 20071129 | US 2006-505630 | 20060817 |
| PRIORITY APPLN. INFO.: | | | US 2001-279524P | P 20010328 |
| | | | US 2001-995847 | A 20011128 |
| | | | WO 2002-US10171 | W 20020328 |

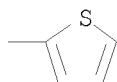
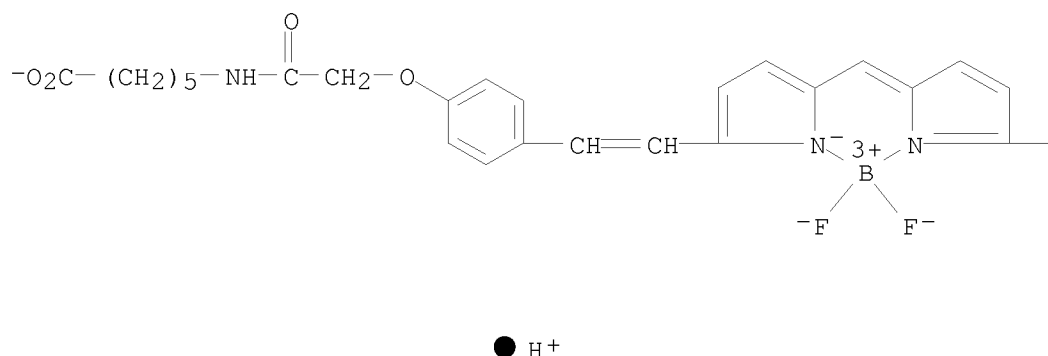
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The authors disclose artificial constructs termed modular mol. clasps and their application in the health care industry, e.g., in therapy, in clin. diagnostics, in in vivo imaging or in drug discovery. Modular mol. clasps are, minimally, comprised of a mol. recognition domain, a conformationally active transducer domain, and an effector domain. In one example, a fusion protein comprising cyan fluorescent protein was joined N-terminal to an anti-gp120 scFv antibody; this in turn was joined N-terminal to yellow fluorescent protein.

IT 268725-21-9, BODIPY 630/650
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (BODIPY 630/650; of modular mol. clasps mediating ligand recognition and detection)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 37 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2002:578876 CAPLUS

DOCUMENT NUMBER: 138:267841

TITLE: Fluorescence data analysis on gel-based biochips

AUTHOR(S): Barsky, Victor; Perov, Alexander; Tokalov, Sergei; Chudinov, Alexander; Kreindlin, Edward; Sharonov, Alexei; Kotova, Ekaterina; Mirzabekov, Andrei

CORPORATE SOURCE: Engelhardt Institute of Molecular Biology, Russian Academy of Sciences, Moscow, Russia

SOURCE: Journal of Biomolecular Screening (2002), 7(3), 247-257

CODEN: JBISF3; ISSN: 1087-0571

PUBLISHER: Mary Ann Liebert, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of biochip readers developed for gel-based biochips includes three imaging models and a novel nonimaging biochip scanner. The imaging readers, ranging from a research-grade versatile reader to a simple portable one, use wide-field objectives and 12-bit digital large-coupled device cameras for parallel addressing of multiple array elements. This feature is valuable for monitoring the kinetics of sample interaction with immobilized probes. Depending on the model and the label used, the sensitivity of these readers approaches 0.3 amol of a labeled sample per gel element. In the selective scanner, both the spot size of the excitation laser beam and the detector field of view match the size of the biochip array elements so that the whole row of the array can be read in a single scan. The portable version reads 50-mm long, 150-element, one-dimensional arrays in 5 s. With a dynamic range of 4000:1, a sensitivity of 1-5 amol of a labeled sample per gel element, and a data

format facilitating online processing, the scanner is an attractive, inexpensive solution for biomedical diagnostics. Fluorophores for sample labeling were compared exptl. in terms of detection sensitivity, influence on duplex stability, and suitability for multilabel anal. and thermodyn. studies. Texas Red and tetracarboxyphenylporphyrin proved to be the best choice for two-wavelength anal. using the imaging readers.

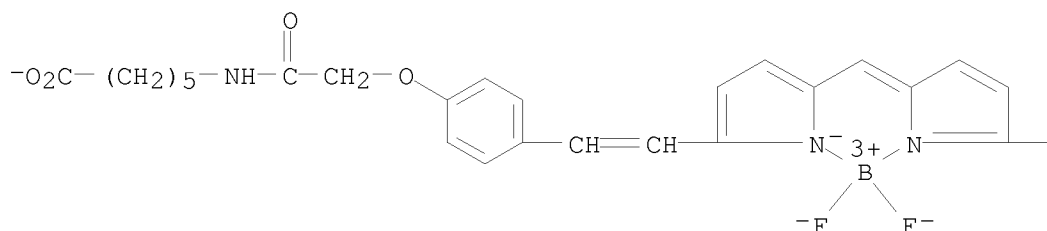
IT 268725-21-9, BODIPY 630/650

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (imaging and nonimaging fluorescent biochip readers for gel-based biochips and comparison of fluorescent dyes)

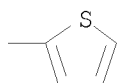
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 38 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2001:713655 CAPLUS
DOCUMENT NUMBER: 135:269637
TITLE: Method for detecting an analyte by fluorescence
INVENTOR(S): Reppy, Mary A.; Sporn, Sarah A.; Saller, Charles F.
PATENT ASSIGNEE(S): Analytical Biological Services, Inc., USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2001071317 | A1 | 20010927 | WO 2001-US8790 | 20010320 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2403549 | A1 | 20010927 | CA 2001-2403549 | 20010320 |
| EP 1279023 | A1 | 20030129 | EP 2001-924210 | 20010320 |
| EP 1279023 | B1 | 20070221 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003528309 | T | 20030924 | JP 2001-569255 | 20010320 |
| US 20040110223 | A1 | 20040610 | US 2001-811538 | 20010320 |
| US 6984528 | B2 | 20060110 | | |
| AT 354793 | T | 20070315 | AT 2001-924210 | 20010320 |
| IL 151674 | A | 20090615 | IL 2001-151674 | 20010320 |
| US 20030175812 | A1 | 20030918 | US 2003-354099 | 20030130 |
| PRIORITY APPLN. INFO.: | | | US 2000-190091P | P 20000320 |
| | | | US 2001-811538 | A3 20010320 |
| | | | WO 2001-US8790 | W 20010320 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Methods for detecting an analyte are described which entail contacting two-dimensional or three-dimensional arrays of a polydiacetylene backbone having incorporated in the array a substrate which has a direct affinity for, can bind with, or can react with the analyte and detecting changes in the fluorescence of the array to indicate the presence of the analyte.

IT 268725-21-9

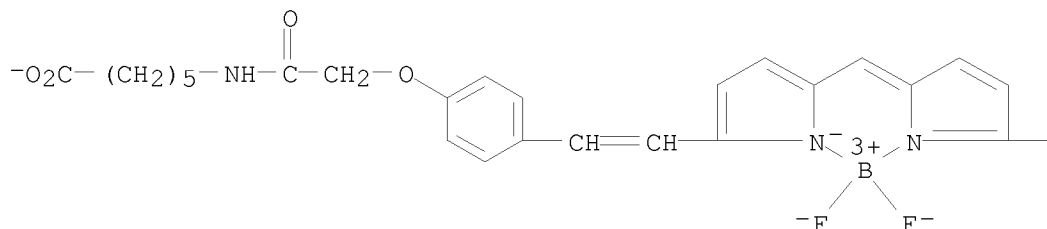
RL: ARG (Analytical reagent use); MOA (Modifier or additive use); TEM (Technical or engineered material use); ANST (Analytical study); USES (Uses)

(BODIPY 630/650; fluorescence assays using substrates incorporated in polydiacetylene backbones)

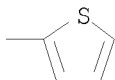
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2001:598282 CAPLUS
 DOCUMENT NUMBER: 135:177704
 TITLE: Fluorescence intensity and lifetime distribution analysis
 INVENTOR(S): Kask, Peet
 PATENT ASSIGNEE(S): Evotec Biosystems A.-G., Germany
 SOURCE: PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001059436 | A2 | 20010816 | WO 2001-EP1470 | 20010210 |
| WO 2001059436 | A3 | 20020314 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 20020063863 | A1 | 20020530 | US 2001-779704 | 20010209 |
| US 6690463 | B2 | 20040210 | | |
| EP 1254362 | A2 | 20021106 | EP 2001-913810 | 20010210 |
| EP 1254362 | B1 | 20071212 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003522946 | T | 20030729 | JP 2001-558718 | 20010210 |
| AT 381013 | T | 20071215 | AT 2001-913810 | 20010210 |
| ES 2298221 | T3 | 20080516 | ES 2001-913810 | 20010210 |
| PRIORITY APPLN. INFO.: | | | US 2000-181548P | P 20000210 |
| | | | WO 2001-EP1470 | W 20010210 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Methods for characterizing samples having fluorescent particles are described which entail exciting particles in a measurement volume to emit fluorescence by a series of excitation pulses, monitoring the emitted fluorescence by detecting sequences of photon counts, determining nos. of photon counts in counting time intervals of given width, determining (in the counting time intervals) detection delay times of the photon counts relative to the corresponding excitation pulses, determining a function of the detection delay

times, determining a probability function of at least two arguments wherein at least one argument is the number of photon counts and another argument is the function of detection delay times, and determining from the probability function

a distribution of particles as a function of ≥ 2 arguments, wherein one argument is a specific brightness of the particles, or a measure thereof, and another argument is a fluorescence lifetime of the particles, or a measure thereof. Use in diagnostics, high throughput drug screening, optimization of properties of mols. and identification of specific cell populations is described.

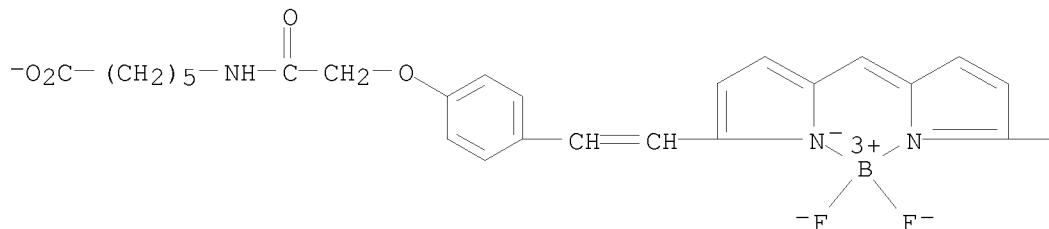
IT 268725-21-9

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (BODIPY 630/650; fluorescence intensity and lifetime distribution anal.)

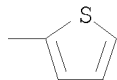
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene- κ N]methyl]-1H-pyrrol-2-yl- κ N]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2001:284151 CAPLUS

DOCUMENT NUMBER: 134:306120

TITLE: Combinatorial oligonucleotide PCR method for rapid, global expression analysis

INVENTOR(S): MacLeod, Michael C.; Aldaz, C. Marcelo; Gaddis, Sara S.

PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA

SOURCE: PCT Int. Appl., 113 pp.

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

CODEN: PIXXD2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001027329 | A2 | 20010419 | WO 2000-US28076 | 20001006 |
| WO 2001027329 | A3 | 20020912 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6221600 | B1 | 20010424 | US 1999-414847 | 19991008 |
| CA 2386410 | A1 | 20010419 | CA 2000-2386410 | 20001006 |
| AU 2000080106 | A | 20010423 | AU 2000-80106 | 20001006 |
| EP 1259641 | A2 | 20021127 | EP 2000-970778 | 20001006 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| US 20030027141 | A1 | 20030206 | US 2001-840722 | 20010423 |
| US 7294487 | B2 | 20071113 | | |

PRIORITY APPLN. INFO.:
 US 1999-414847 A1 19991008
 WO 2000-US28076 W 20001006

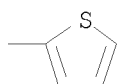
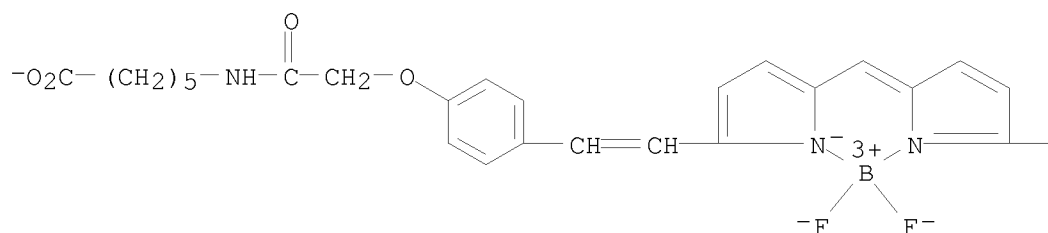
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to a combinatorial oligonucleotide PCR method for the detection of gene expression and anal. of both known and unknown genes. The invention is a highly sensitive, rapid, and cost-effective means of monitoring gene expression, as well as for the anal. and quantitation of changes in gene expression for a defined set of genes and in response to a wide variety of events. It is an important feature of the present invention that no single mol. species of cDNA gives rise to more than one fragment in the collection of products which are subsequently amplified and representative of each expressed gene. This achievement is facilitated by immobilizing the cDNA prior to digesting and then digesting with sequentially with two frequently cutting enzymes. Linker oligomers are ligated to each cut site following the resp. digestion. Primers, complementary to the oligomer sequence with an addnl. 3' variable sequence are used to amplify the fragments. Using an array of fragments theor. facilitates the amplification of all of the possible messages in a given sample.

IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (BODIPY 630/650, primers labeled with; combinatorial oligonucleotide PCR method for rapid, global expression anal.)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 41 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2001:247530 CAPLUS

DOCUMENT NUMBER: 134:276463

TITLE: Methods of ranking oligonucleotide probes for hybridization specificity using wash dissociation histories

INVENTOR(S): Stoughton, Roland; Burchard, Julja

PATENT ASSIGNEE(S): Rosetta Inpharmatics, Inc., USA

SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001023600 | A2 | 20010405 | WO 2000-US26723 | 20000929 |
| WO 2001023600 | A3 | 20010823 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, SZ, BE, CY, FR, GR, IE, IT, MC, NL, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |

| | | | | |
|------------------------|----|----------|-----------------|------------|
| US 6673536 | B1 | 20040106 | US 1999-408582 | 19990929 |
| AU 2000077303 | A | 20010430 | AU 2000-77303 | 20000929 |
| PRIORITY APPLN. INFO.: | | | US 1999-408582 | A 19990929 |
| | | | WO 2000-US26723 | W 20000929 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

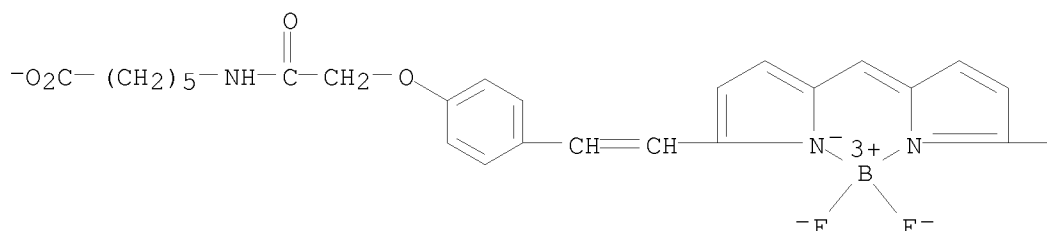
AB The present invention provides methods and systems, particularly computer systems, for determining the relative specificity with which a particular polynucleotide mol. hybridizes to a polynucleotide probe. For example, the methods and systems of the invention enable a user to compare the specificity with which different polynucleotides hybridize to a given probe and/or rank these polynucleotides according to their specificity to that probe. The method and systems of the invention also enable a user to compare the specificity with which a particular polynucleotide hybridizes to different probes, and/or rank those different probes according to their specificity for that particular polynucleotide.

IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (fluorescent label; methods of ranking oligonucleotide probes for hybridization specificity using wash dissociation histories)

RN 268725-21-9 CAPLUS

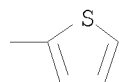
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

PAGE 1-B



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 42 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2001:188829 CAPLUS

DOCUMENT NUMBER: 135:237259

TITLE: Use of fluorescently labeled DNA and a scanner for

AB The electrophoretic mobility shift assay (EMSA) is commonly used to determine the presence of specific transcription factors within the nucleus. This method relies on labeling of DNA with radioisotope that require special precautions for handling and disposal, and pose health risk. The use of fluorescently labeled oligonucleotide in EMSA was studied to overcome the risk of using radioisotope. Exts. prepared from U87 MG glioblastomas were used to detect the binding of NFκB and the relative sensitivity of the fluorescently labeled oligonucleotides were compared with the radioactively labeled oligonucleotide. The potential use of fluorescently labeled compds. for multiplex anal. was also studied. Results indicated that EMSA may be performed with adequate sensitivity by using fluorescently labeled probes, thereby reducing the need for radioisotope use in laboratory Furthermore, the sensitivity of using fluorescently labeled oligonucleotides was slightly less than the sensitivity of using radioactively labeled oligonucleotides.

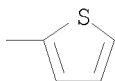
IT 268725-21-9
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(BODIPY 630/650; use of fluorescently labeled DNA and a scanner for electrophoretic mobility shift assays for detection of transcription factors)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[2-[4-[2-[5-[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)-(CA INDEX NAME)

[O-]C(=O)CCCCCN(C(=O)OCC1=CC=CC=C1)/C=C/c2ccc3[n+](c4ccccc4[n-]3)B(F)(F)c5ccccc52

PAGE 1-B



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 43 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2000:681124 CAPLUS

DOCUMENT NUMBER: 134:21008

TITLE: Flow cytometric monitoring of *Rhodococcus erythropolis*
and *Ochrobactrum anthropi* in a mixed culture

AUTHOR(S): Muller, S.; Losche, A.; Mertingk, H.; Beisker, W.;
Babel, W.

CORPORATE SOURCE: Sachsisches Institut fur Angewandte Biotechnologie
(SIAB) an der Universitat Leipzig Permoserstrae 15,
Leipzig, 04318, Germany

SOURCE: Acta Biotechnologica (2000), 20(3-4), 219-233

CODEN: ACBTDD; ISSN: 0138-4988

PUBLISHER: Wiley-VCH Verlag Berlin GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The GRAM-pos. bacterium *Rhodococcus erythropolis* K2-3 and the GRAM-neg.
Ochrobactrum anthropi K2-14 are capable of synergistically degrading
4-(2,4-dichlorophenoxy)butyric acid (2,4-DB). The 2 strains execute this
task in a symbiotic manner, but the nature of the interactions involved in
the degradation is only partially understood as yet. An essential 1st step in
elucidating the interaction is to be able to monitor the 2 strains sep.,
at the cellular level, within mixed populations. Therefore a method
exploiting fluorescently labeled lectin probes was developed. Since Con A
binds specifically to *R. erythropolis* K2-3, it was selected and linked to
the fluorescent dye Bodipy 630/650, which has an excitation maximum in the
red part of the visible light spectrum. Forward light scatter (FSC) and
DNA fluorescence from both strains were also measured to obtain
simultaneous information about their physiol. states. The 3 parameters
were conveniently monitored by dual and triple excitation flow cytometry
in conjunction with double fluorescent staining techniques. The strains
were identified using an epifluorescence microscope. These techniques
were found powerful tools for the population anal. of this mixed bacterial
system.

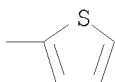
IT 268725-21-9D, BODIPY 630/650, lectin conjugate

RL: RCT (Reactant); RACT (Reactant or reagent)

(BODIPY 630/650; flow cytometric monitoring of *Rhodococcus erythropolis*
and *Ochrobactrum anthropi* in mixed culture)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-
κN]methyl]-1H-pyrrol-2-yl-
κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1),
(T-4)- (CA INDEX NAME)



L8 ANSWER 44 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2000:441672 CAPLUS
DOCUMENT NUMBER: 133:55627
TITLE: Integrated portable biological detection system
INVENTOR(S): Cheng, Jing; Wu, Lei; Heller, Michael; Sheldon, Ed;
Diver, Jonathan; O'Connell, James P.; Smolko, Dan;
Jalali, Shila; Willoughby, David
PATENT ASSIGNEE(S): Nanogen, Inc., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 46
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2000037163 | A1 | 20000629 | WO 1999-US31098 | 19991222 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2353461 | A1 | 20000629 | CA 1999-2353461 | 19991222 |
| BR 9916840 | A | 20011009 | BR 1999-16840 | 19991222 |
| EP 1144092 | A1 | 20011017 | EP 1999-968558 | 19991222 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

| | | | | |
|---------------|----|----------|----------------|----------|
| JP 2002536962 | T | 20021105 | JP 2000-589268 | 19991222 |
| NZ 512087 | A | 20030530 | NZ 1999-512087 | 19991222 |
| AU 763514 | B2 | 20030724 | AU 2000-25950 | 19991222 |
| AU 777515 | B2 | 20041021 | AU 2001-61873 | 20010817 |

PRIORITY APPLN. INFO.:

| | | |
|-----------------|----|----------|
| US 1998-113730P | P | 19981223 |
| AU 1998-85228 | A3 | 19980917 |
| WO 1999-US31098 | W | 19991222 |

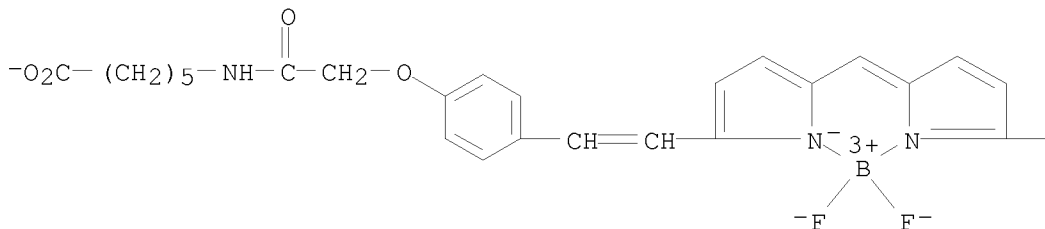
AB Provided is an integrated, portable system and device for performing active, integrated multi-step sample preparation and mol. diagnostic anal. of biol. samples using a minimal number of electronically addressable microchips. Bacterial and cancer cells were separated from peripheral human blood in microfabricated electronic chips by dielectrophoresis. The isolated cells were examined by staining the nuclei with fluorescent dye followed by laser induced fluorescence imaging. DNA and RNA were released from the isolated cells electronically and specific marker sequences were detected by DNA amplification followed by electronic hybridization to immobilized capture probes. Efforts towards the construction of a "laboratory-on-a-chip" system are presented which involves the selection of DNA probes, dyes, reagents and prototyping of the fully integrated portable instrument.

IT 268725-21-9D, conjugates with oligonucleotide probe
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(integrated portable biol. detection system)

RN 268725-21-9 CAPLUS

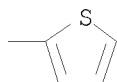
CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺

PAGE 1-B



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2000:314865 CAPLUS

DOCUMENT NUMBER: 132:344077

TITLE: Method for determining mRNA tissue distribution using restriction endonuclease digestion and PCR amplification for database indexing and drug screening

INVENTOR(S): Hasel, Karl W.; Hilbush, Brian S.

PATENT ASSIGNEE(S): Digital Gene Technologies, Inc., USA

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| ----- | --- | ----- | ----- | ----- |
| WO 2000026406 | A1 | 20000511 | WO 1999-US23655 | 19991014 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2350168 | A1 | 20000511 | CA 1999-2350168 | 19991014 |
| EP 1127159 | A1 | 20010829 | EP 1999-954838 | 19991014 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002528135 | T | 20020903 | JP 2000-579778 | 19991014 |
| US 20020012922 | A1 | 20020131 | US 2001-775217 | 20010201 |
| NO 2001002203 | A | 20010702 | NO 2001-2203 | 20010503 |
| MX 2001004550 | A | 20020918 | MX 2001-4550 | 20010504 |
| PRIORITY APPLN. INFO.: | | | US 1998-186869 | A 19981104 |
| | | | WO 1999-US23655 | W 19991014 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An improved method for the simultaneous sequence-specific identification of mRNAs in a mRNA population allows the visualization of nearly every mRNA expressed by a tissue as a distinct band on a gel whose intensity corresponds roughly to the concentration of the mRNA. In general, the method comprises the formation of cDNA using anchor primers to fix a 3'-endpoint, producing cloned inserts from the cDNA in a vector containing a bacteriophage-specific promoter for subsequent RNA synthesis, generating linearized fragments of the cloned inserts by restriction endonuclease digestion, preparing cRNA, transcribing cDNA from the cRNA, and performing two sequence-specific PCR amplifications of the cDNA. The products of the second PCR amplification step are resolved by gel electrophoresis to obtain the length and the amount of each. In preferred embodiments, the method comprises comparing the length and at least part of the nucleotide sequence of the PCR products to expected values determined from a database of nucleotide sequences. Such database containing information on mRNA sequences, gene mapping, and cellular distribution is further claimed. The method can identify changes in expression of mRNA associated with the administration of drugs or with physiol. or pathol. conditions. Also provided are vectors, host cells, and primers useful for the practice of the improved method. The primers are preferably labeled and contain phosphorothioate linkages. Two mRNA samples from serum-starved and serum-added human MG63 osteosarcoma cells were analyzed by the method of this invention with

results showing significant improvement over the previous method using only one PCR step.

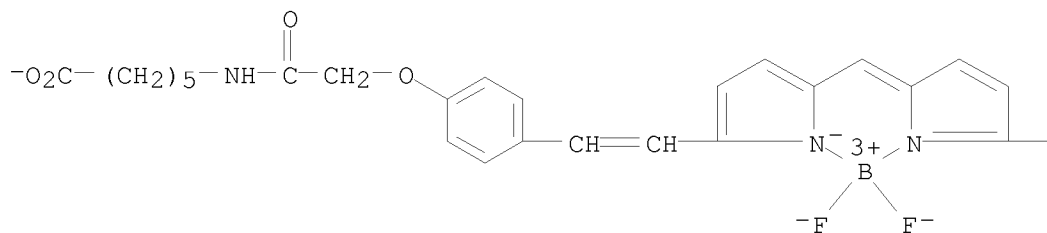
IT 268725-21-9

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (fluorescent label; method for determining mRNA tissue distribution using restriction endonuclease digestion and PCR amplification for database indexing and drug screening)

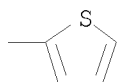
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 46 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2000:260581 CAPLUS

DOCUMENT NUMBER: 132:289573

TITLE: Fluorescent probes for chromosomal painting

INVENTOR(S): Cherif, Dorra

PATENT ASSIGNEE(S): Genset, Fr.

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2000022164 | A1 | 20000420 | WO 1999-FR2517 | 19991015 |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
 MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
 SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|--|----|----------|-----------------|----------|
| FR 2784683 | A1 | 20000421 | FR 1998-12957 | 19981015 |
| FR 2784683 | B1 | 20021213 | | |
| CA 2345381 | A1 | 20000420 | CA 1999-2345381 | 19991015 |
| AU 9960981 | A | 20000501 | AU 1999-60981 | 19991015 |
| AU 769073 | B2 | 20040115 | | |
| EP 1121461 | A1 | 20010808 | EP 1999-947589 | 19991015 |
| EP 1121461 | B1 | 20071226 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY | | | | |
| JP 2002527077 | T | 20020827 | JP 2000-576054 | 19991015 |
| US 6562959 | B1 | 20030513 | US 1999-418804 | 19991015 |
| PT 1121461 | E | 20080110 | PT 1999-947589 | 19991015 |
| AT 382096 | T | 20080115 | AT 1999-947589 | 19991015 |
| ES 2299259 | T3 | 20080516 | ES 1999-947589 | 19991015 |
| US 7011942 | B1 | 20060314 | US 2002-807507 | 20020529 |
| US 20030099989 | A1 | 20030529 | US 2002-251699 | 20020919 |
| US 6905828 | B2 | 20050614 | | |

PRIORITY APPLN. INFO.:

| | | |
|----------------|----|----------|
| FR 1998-12957 | A | 19981015 |
| US 1999-418804 | A3 | 19991015 |
| WO 1999-FR2517 | W | 19991015 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention concerns fluorescent probes used in multicolor in situ fluorescent hybridization methods, and principally chromosomal painting. The probes designed for marking a chromosome are such that they consist of a set of DNA segments more represented in certain chromosomal bands and are obtained by Interspersed Repeated Sequence-PCR amplification from said chromosomes using PCR primers specific for the repeated and dispersed DNA sequences Alu and LINE. The invention further concerns methods for producing said probes, multicolor FISH methods capable of using said probes, and diagnostic kits comprising them. The invention also concerns combinations of fluorophores and optical filters.

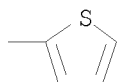
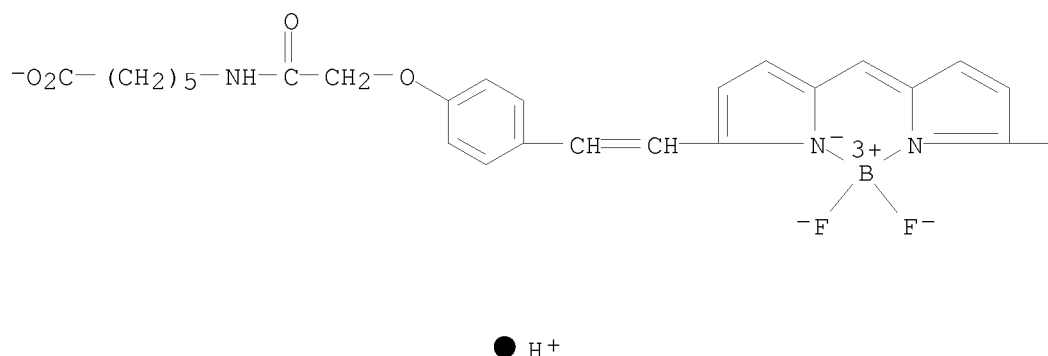
IT 268725-21-9DP, BODIPY 630/650, conjugates with probes

RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(BODIPY 630/650; fluorescent probes for chromosomal painting)

RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 47 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2000:53947 CAPLUS

DOCUMENT NUMBER: 132:103733

TITLE: Methods for determining cross-hybridization based on dissociation kinetics

INVENTOR(S): Burchard, Julja; Stoughton, Roland; Friend, Stephen H.

PATENT ASSIGNEE(S): Rosetta Inpharmatics, Inc., USA

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2000003039 | A1 | 20000120 | WO 1999-US15813 | 19990713 |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 6171794 | B1 | 20010109 | US 1999-335971 | 19990618 |
| AU 9950992 | A | 20000201 | AU 1999-50992 | 19990713 |
| PRIORITY APPLN. INFO.: | | | US 1998-92512P | P 19980713 |
| | | | US 1999-335971 | A 19990618 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

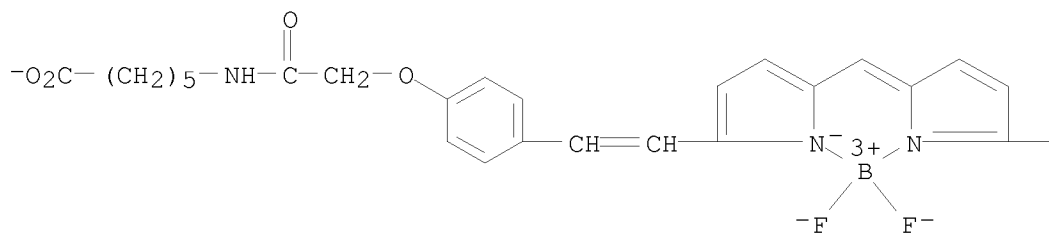
AB The present invention provides methods for distinguishing the fractions of polynucleotide sequences which hybridize to any given probe, including probes on microarrays such as those described herein. In particular, the present invention enables users to identify the fraction of sequences which are perfectly complementary to a probe, thereby correcting for effects of cross-hybridization in a hybridization assay. The methods of the invention work by monitoring the kinetics of dissociation of sequences from the probe so that a resulting "dissociation curve" may be compared to a combination of the individual "dissociation profiles" for each sequence which hybridizes. In alternative embodiments, the invention also provides computer systems for performing the present methods, as well as databases of the dissociation profiles.

IT 268725-21-9, BODIPY 630/650
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (BODIPY 630/650, fluorescent indicator; methods for determining cross-hybridization based on dissociation kinetics)

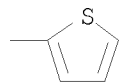
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A

● H⁺

PAGE 1-B



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1998:312612 CAPLUS

DOCUMENT NUMBER: 129:78684

ORIGINAL REFERENCE NO.: 129:16192h, 16193a

TITLE: Time-resolved identification of individual

mononucleotide molecules in aqueous solution with pulsed semiconductor lasers

AUTHOR(S): Sauer, Markus; Arden-Jacob, Jutta; Drexhage, Karl H.; Gobel, Florian; Lieberwirth, Ulrike; Muhlegger, Klaus; Muller, Ralph; Wolfrum, Jurgen; Zander, Christoph

CORPORATE SOURCE: Physikalisch-Chemisches Institut, Universitat Heidelberg, Heidelberg, 69120, Germany

SOURCE: Bioimaging (1998), 6(1), 14-24
CODEN: BOIMEL; ISSN: 0966-9051

PUBLISHER: Institute of Physics Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

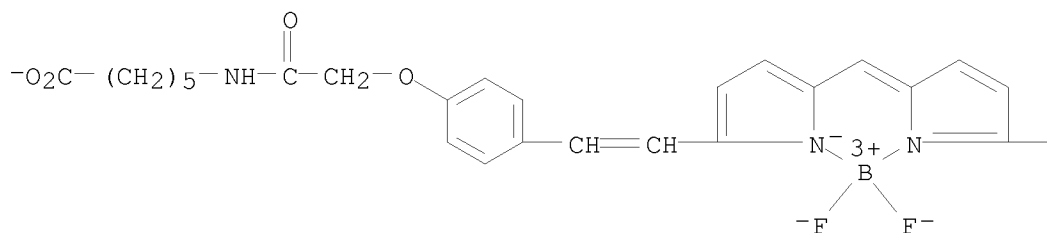
AB We applied a short-pulse diode laser emitting at 640 nm with a repetition rate of 56 MHz in combination with a confocal microscope to study bursts of fluorescence photons from individual differently labeled mononucleotide mols. in water. Two newly synthesized dyes, an oxazine dye (MR121) and a rhodamine dye (JA53), and two com. available dyes, a carbocyanine dye (Cy5) and a bora-diaza-indacene dye (Bodipy630/650), were used as fluorescent labels. The time-resolved fluorescence signals of individual mononucleotide mols. in water were analyzed and identified by a maximum likelihood estimator (MLE). Taking only those single mol. transits which contain more than 30 collected photoelectrons, the two labeled mononucleotide mols., Cy5-dCTP and Bodipy-dUTP, can be identified by time-resolved fluorescence spectroscopy with a probability of correct classification of greater than 99%. Our results show that at least three differently labeled mononucleotide mols. can be identified in a common aqueous solution. We obtain an overall classification probability of 90% for the time-resolved identification of Cy5-dCTP, MR121-dUTP and Bodipy-dUTP mols. via their characteristic fluorescence lifetimes of 1.05 ± 0.33 ns (Cy5-dCTP), 2.07 ± 0.59 ns (MR121-dUTP) and 3.88 ± 1.71 ns (Bodipy-dUTP).

IT 268725-21-9, BODIPY 630/650
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (BODIPY 630/650; time-resolved identification of individual mononucleotide mols. in aqueous solution with pulsed semiconductor lasers)

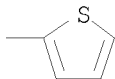
RN 268725-21-9 CAPLUS

CN Borate(1-), difluoro[6-[[2-[4-[2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-κN]methyl]-1H-pyrrol-2-yl-κN]ethenyl]phenoxy]acetyl]amino]hexanoato(2-)]-, hydrogen (1:1), (T-4)- (CA INDEX NAME)

PAGE 1-A



● H⁺



OS.CITING REF COUNT: 59 THERE ARE 59 CAPLUS RECORDS THAT CITE THIS
RECORD (60 CITINGS)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'REGISTRY' ENTERED AT 17:07:21 ON 26 JAN 2011

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D
L2 13 SEA FILE=REGISTRY SSS SAM L1
L3 284 SEA FILE=REGISTRY SSS FUL L1
L4 254 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L3 AND CAPLUS/LC

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L5 166 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L4
L6 8 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L5 AND FLUORES?
D L6 IBIB GI ABS HITSTR 1-8

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D

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L8 48 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L7
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| | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 286.60 | 543.13 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -41.76 | -48.72 |

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 17:29:02 ON 26 JAN 2011